

ART OF THE BRONZE AGE

SOUTHEASTERN IRAN,
WESTERN CENTRAL ASIA,
AND THE INDUS VALLEY

HOLLY PITTMAN



THE METROPOLITAN MUSEUM OF ART

VISIT...

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WITH COMMENTS ON STYLE
AND ICONOGRAPHY BY EDITH PORADA

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PREFACE

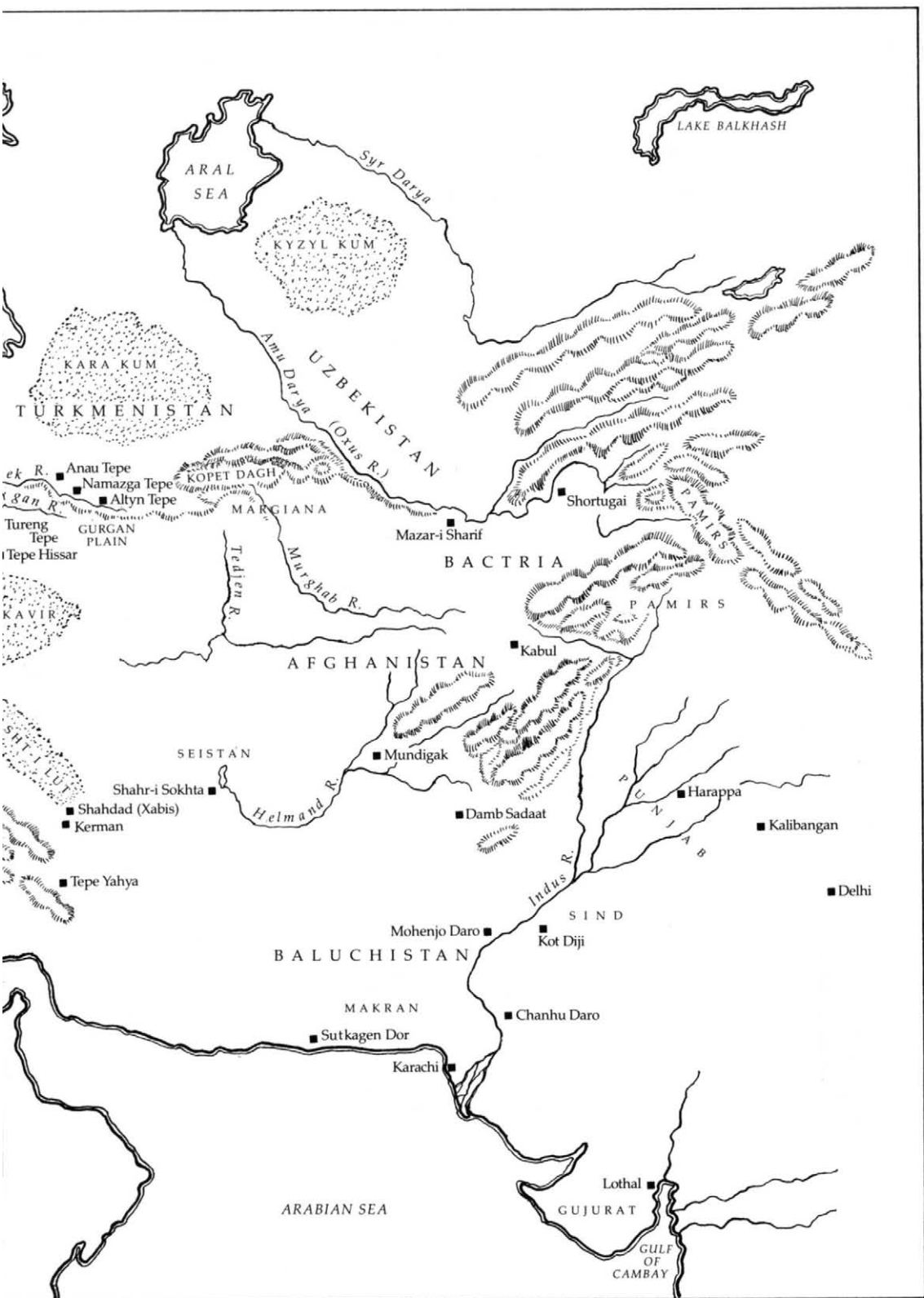
Until recently, the Metropolitan has had in its collection few ancient objects from eastern Iran, western Central Asia, or the Indus Valley. With the opening of the new galleries of ancient Near Eastern art, we have extended our display to include items from these regions acquired by the department through purchase, gift, and loan. Judge Steven D. Robinson of Miami, Florida, suggested that we bring out a general guide to help in the appreciation of these works, unfamiliar to many Museum visitors, and he has made this publication possible with a generous grant. Judge Robinson has a large collection of objects from western Central Asia, and many of those illustrated here are his gifts to the Museum. We are extremely grateful for his continuing interest and support. Other objects published here were given or lent to the Museum by additional collectors: Mrs. Constantine Sidamon-Eristoff, Dr. and Mrs. Martin Cherkasky, Mr. Steven Kossak, and Mr. and Mrs. Norbert Schimmel. To each of them we express our thanks.

Dr. Edith Porada, Arthur Lehman Professor Emeritus of Art History and Archaeology at Columbia University and my mentor, has long been interested in the art of ancient Iran and its eastern neighbors. She has contributed to this volume comments on the style and iconography of the art of these regions, adding insight and breadth by linking the eastern traditions with those of Elam and Mesopotamia. I am grateful for her years of dedicated guidance and am honored to collaborate with her. I wish to thank Dr. Prudence O. Harper, Curator in the Department of Ancient Near Eastern Art, who initiated and planned the new installation of our holdings; she has continually advised and encouraged me in my work. My thanks also go to colleagues and friends who read and commented on my manuscript—especially to Derek Miller and Joanna Ekman, editor at the Metropolitan, who both helped to bring these pieces alive for a wider audience.



The Near East

0 50 100 200 300 400 500 miles



INTRODUCTION

The ancient cultures of the Near East have become known to us slowly. Before the cuneiform inscriptions were deciphered in the middle of the last century, we depended on the much later biblical, Greek, and Roman sources to reveal glimpses of the lands, cities, and rulers of ancient Mesopotamia, the land between the Tigris and Euphrates rivers, traditionally considered the heartland of the ancient Near East. Beyond Mesopotamia, other cultures, most without written languages, also thrived. To the west were those of the Levant and Anatolia; to the east, those of the Iranian Plateau, Central Asia, and the valley of the Indus River. Until the turn of this century these apparently peripheral cultures were known by little more than a few odd pieces, objects that floated without context on museum shelves, understood only as historical curiosities. Although there are still large gaps in our understanding, our knowledge about these regions has increased greatly, and we now know that major independent, complex cultures thrived there, not peripheral to others, but core areas in themselves.

With the opening of the permanent installation of the galleries of ancient Near Eastern art, visitors to the Metropolitan Museum are now able to see ancient artifacts and works of art from these lands far from Mesopotamia. This publication is meant to describe objects assigned to regions far to the east of the Tigris and Euphrates where, during the period known as the Middle Bronze Age (about 2500 to 1600 B.C.), cultures thrived in eastern Iran, western Central Asia, and the valley of the Indus River, the inhabitants of each developing a way of life distinguished by its own organization and material culture.

The highlands of eastern Iran and western Central Asia are rich in raw materials, particularly in stones such as alabaster, carnelian, chlorite, and lapis lazuli, and in metals such as copper, tin, and gold. Some of these resources were exploited by local inhabitants of

the earliest settlements for tools and ornaments. By the beginning of the Early Bronze Age, the rulers of the urban centers to the west, in southern Mesopotamia and in neighboring Khuzistan, began to demand such raw materials lacking in their lowland alluvial environments. One of the places in which they found these materials was the east. Thus began contact between cultures separated by thousands of miles that lasted more than a millennium. While the nature of this contact, its intensity, and its path changed with circumstances prevailing either in the west or in the east, its existence is certain. Items imported from these regions to Mesopotamia and western Iranian sites, western influences reflected in artifacts from eastern sites, and references in written texts of Mesopotamia are the evidence we have now, almost five thousand years later.

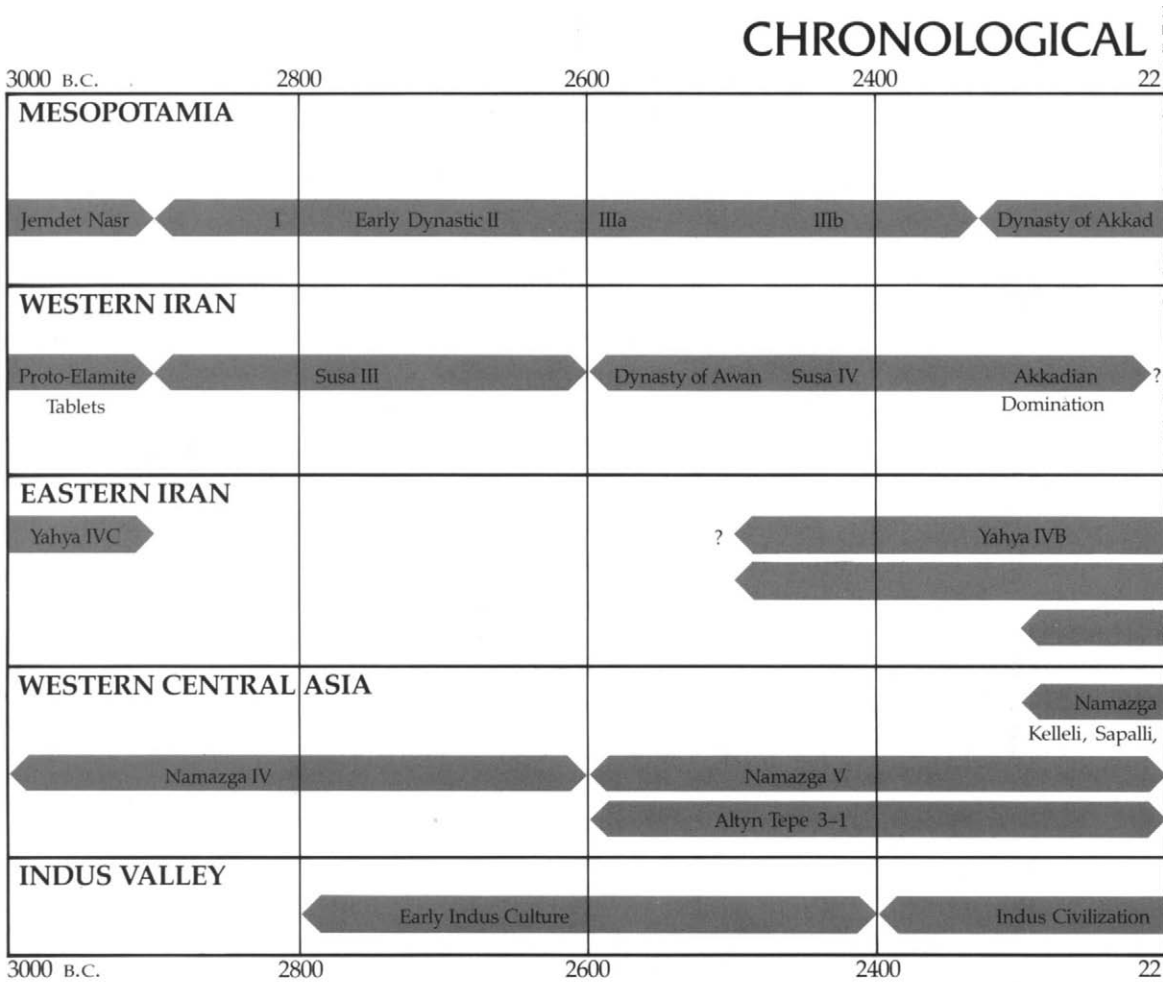
Geographically similar to the alluvial valley of the Tigris and Euphrates is the valley of the Indus River, where a seemingly urban culture developed during the Middle Bronze Age on the fertile riverine plain. The role played by the inhabitants of the Indus Valley in interregional exchange is even less understood than that of resource-rich eastern Iran and western Central Asia. Some scholars have argued that an elaborate Indus merchant class was in close and frequent contact with the west, serving as middlemen for Central Asian and eastern Iranian goods. Others believe that the Indus Valley people exploited eastern Iranian and Central Asian resources, having only limited and indirect contact with the west. Still others think that the urban culture of the Indus Valley was self-contained, with little or no direct contact with either the highland suppliers or the lowland consumers.

Although the distances were enormous and the evidence is sparse and contradictory, it is certain that goods moved along several overland routes and also by sea, up the Persian Gulf to the mouth of the Tigris and Euphrates. These ancient people were certainly aware of the existence of their neighbors.

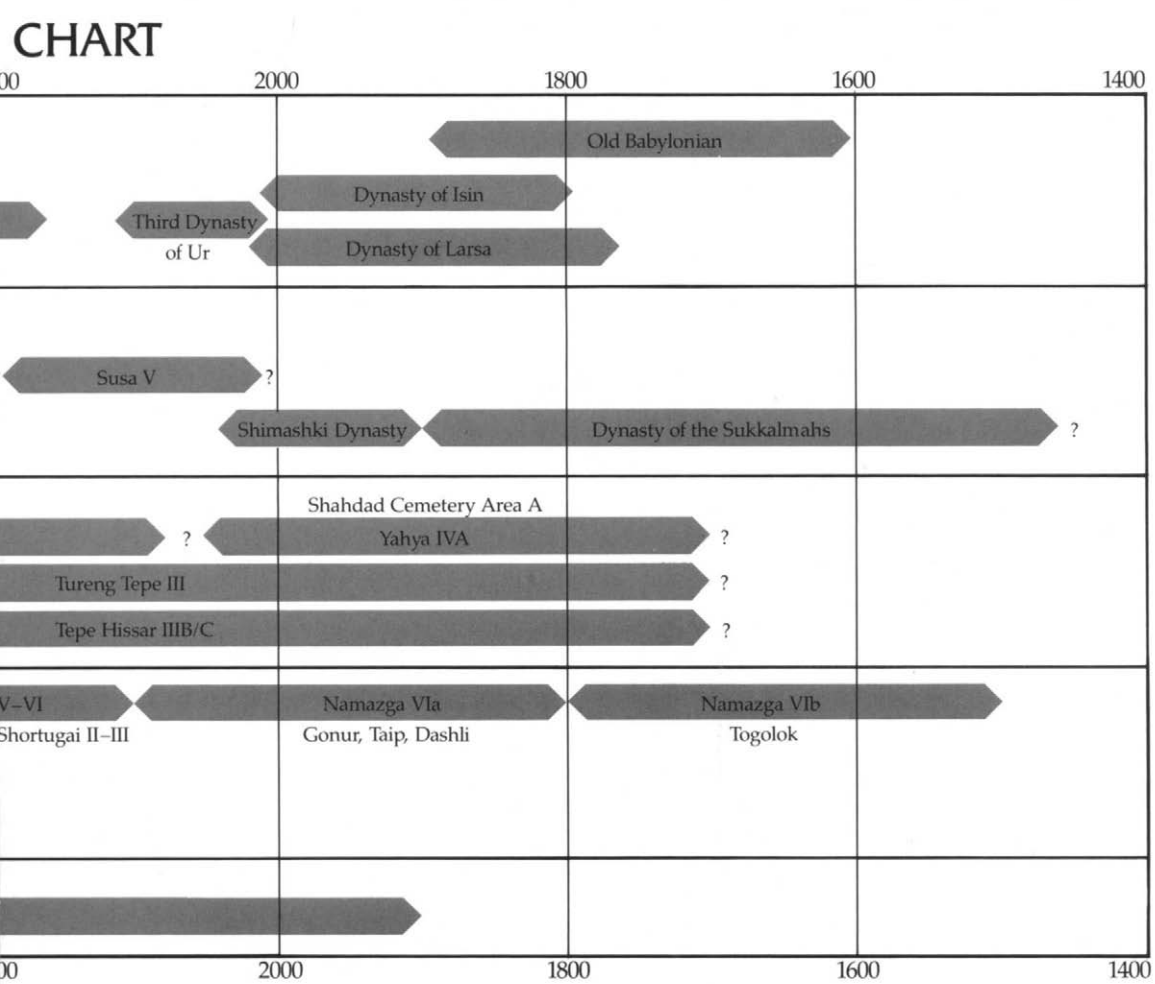
What we know of these eastern regions during the third millennium B.C. comes primarily from the excavations and surveys of ancient sites, which began in the early decades of this century and have become

increasingly numerous in recent years. The information gleaned from artifacts whose findspots are properly recorded has allowed scholars to make enormous strides toward reconstructing the history and characters of the ancient cultures of these lands.

Unfortunately, none of the objects presented here were discovered under controlled archaeological conditions. The purpose of this publication is to place in their proper context the objects in the Metropolitan's collection and those on loan to the Museum, and to assign to each an identity based on comparisons with other objects whose provenances are known certainly. These comparisons include elements of materials; techniques of manufacture; shape; function; style; and iconography. The present volume is not a comprehensive



survey of the Middle Bronze Age in these eastern lands. Rather it is an attempt to briefly summarize what we know about these cultures as a background against which we can propose the cultural affiliation of some objects. To go beyond this point with nonexcavated objects is to venture onto shaky ground, where hypothesis can too easily be confused with fact. Among the pieces in this guide are varieties previously unknown in the excavated corpus of objects that enlarge our understanding of the material culture of particular regions. Necessarily absent from the text are conclusions about problems like chronology or interregional contact. Only upon further research and excavation in these archaeologically rich lands will we be able to address such problems with the serious attention they require.





SOUTHEASTERN IRAN

The mountainous region of eastern Iran, south of the formidable desert the Dasht-i Lut, supported a number of distinctive cultures during the Early and Middle Bronze Ages of the third millennium and the beginning of the second millennium B.C. The first modern reports of these cultures included those by Sir Percy Sykes, a British explorer who at the turn of this century described his travels around the modern city of Kerman, on the southwestern border of the Lut, making note of such archaeological sites as Khinaman.¹ It was the indefatigable Sir Aurel Stein, however, who made the first serious archaeological study of this now-desolate land; in the early 1930s he surveyed a large number of sites and sampled and recorded artifacts from them.² Working from the results of Stein's accomplishments, American, British, and Iranian archaeologists conducted systematic surveys and excavations in the late 1960s and the 1970s that allowed scholars to construct a chronological and cultural framework for ancient eastern Iran and Baluchistan. Two of the sites investigated in this region that expanded our understanding of the Bronze Age cultures and produced objects similar to those on display in the Museum are Tepe Yahya and a cemetery site near the village of Shahdad (formerly called Xabis), on the western edge of the Dasht-i Lut.

1

Vase with imbrications
and date palms
Chlorite or steatite
H. 9¼ inches (23.5 cm.)
Gift of J. Pierpont Morgan,
1917
17.190.106

TEPE YAHYA

Excavations of the mound of Tepe Yahya, in the Soghun Valley, 225 kilometers directly south of Kerman, by an American team from Harvard University defined three

major cultural phases of the third millennium. The first, Level IVC, was established around 3000 B.C., ending a hiatus of unknown length in the settlement. Among the artifacts found in this level are tablets written in Proto-Elamite script and impressions of seals carved in Proto-Elamite style. These, along with ceramic evidence, suggest that some of the people of Level IVC either were strongly influenced by or were immigrants from the Proto-Elamite urban centers of Susa, in Khuzistan, and Tall-i Malyan (ancient Anshan), in Fars, both a considerable distance to the west.

Sometime during the second quarter of the third millennium, after another apparently short gap in the occupation of the mound, Yahya was settled again, this time by people who, from the appearance of their material remains, were indigenous to the valley. The precise dates of this settlement, Level IVB, are uncertain, but the occupation probably ended during the last quarter of the third millennium. The final phase before an abandonment that reached into the Iron Age is Level IVA, a prosperous period lasting into the first quarter of the second millennium. The western affiliation reflected in the material culture of the early part of the third millennium is replaced in Levels IVB and IVA by a local style and iconography that are distinctly south-eastern Iranian.³



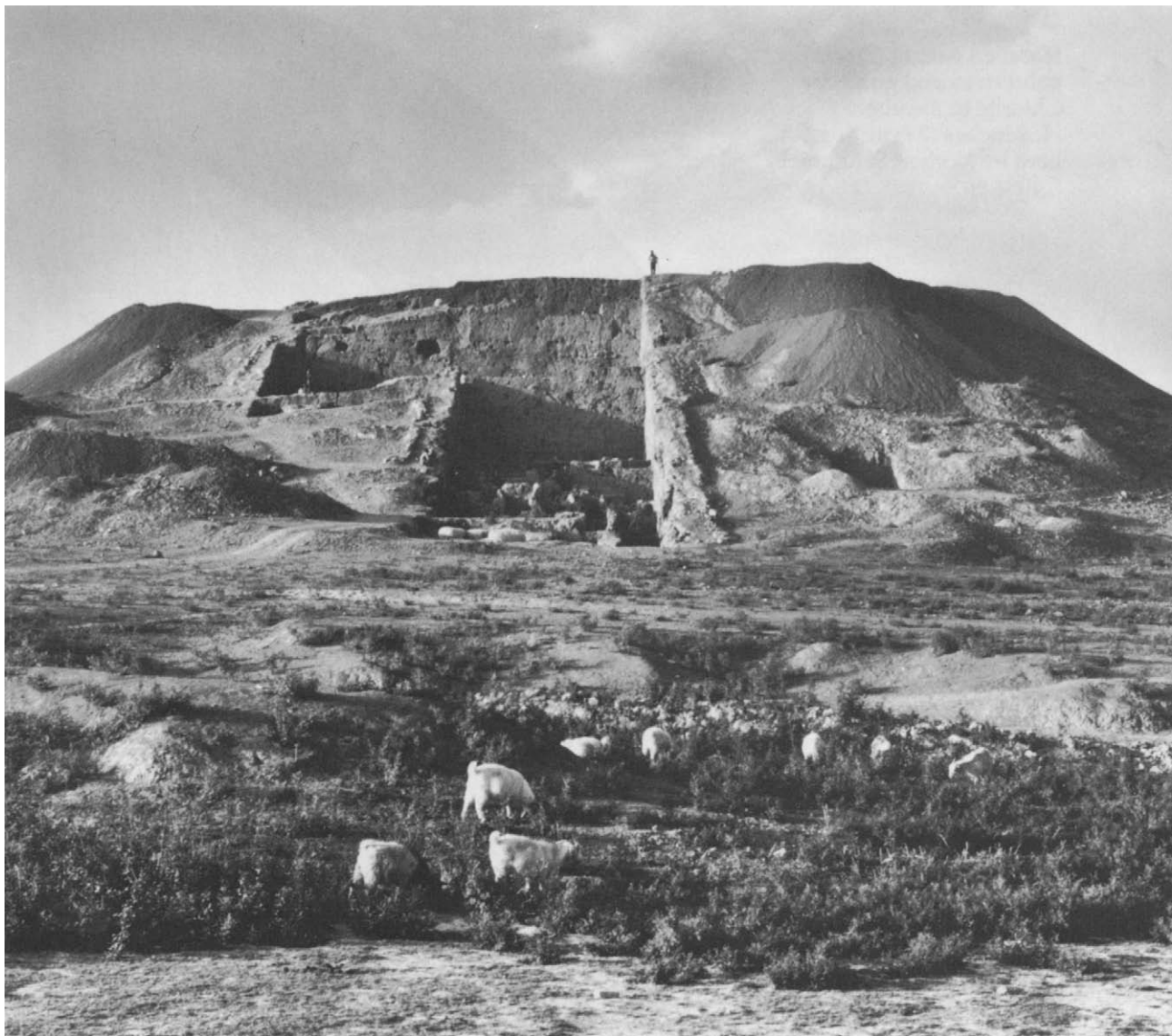
2

Vase with woven pattern
Chlorite or steatite
H. 3 inches (7.5 cm.)
Purchase, Mrs. Vladimir S.
Littauer Gift, 1970
1970.33.2

INTERCULTURAL STYLE CARVED CHLORITE OBJECTS

In the hills surrounding Tepe Yahya there are abundant deposits of a soft, soapy-textured, greenish-gray mineral known as chlorite. The inhabitants of the region have carved objects in chlorite from the earliest Neolithic settlements until today. During the middle of the third millennium, a substantial industry of carved chlorite flourished at Tepe Yahya. These objects, generally vessels, were decorated in a particular manner called the Intercultural Style in a detailed study by Philip Kohl.⁴

The first examples of these objects, carved usually in chlorite but sometimes in the similar-looking stone steatite, were found in early excavations of large



View of the step trench
on the southern side
of the mound of Tepe Yahya.

3

Handled weight (?) with
palm trees and guilloché
Chlorite or steatite
H. 9 inches (23 cm.)
Lent by Norbert Schimmel
L.1984.20





Opposite side, Fig. 3





4

Vessel with two humped bulls
(two views)
Chlorite or steatite
H. 4½ inches (11.4 cm.)
Lent by Mrs. Constantine
Sidamon-Eristoff
L.1978.31



urban centers in lowland Mesopotamia and Iran, eastern Syria, and the Indus Valley. Most were discovered either in monumental temples or palaces, or in the rich graves of noble or royal persons. Some carry dedicatory inscriptions in cuneiform to royal or divine personages; others are identified as the booty of a successful military encounter. Even before a center of production was identified, the peculiar stylistic and iconographic features of these vessels led some scholars to speculate that they belonged to a world elsewhere, perhaps to the east, in Iran. With the discovery of a chlorite workshop in the upper part of Level IVB at Tepe Yahya,⁵ along with numerous carved chlorite fragments on the surface of sites on islands in the Gulf,⁶ it is now known that Intercultural Style chlorite pieces were imported either for themselves or for their contents, perhaps as status objects, by members of the ruling elite in Early Dynastic Mesopotamia.

On the basis of compositional analysis of the stone, Kohl suggests that there were at least three production centers of these chlorite and steatite objects. The only one that has been actually identified is the one at Tepe Yahya. He speculates that other centers might be located near sources on the south coast of Iran, in the region of the Gulf, and in the foothills of the Zagros mountains.

The date of these Intercultural Style chlorite objects is as problematic as their centers of production. The stratigraphic distribution of examples found in dated archaeological contexts leads Kohl to think that the style was relatively short-lived and was contemporary with Early Dynastic II and IIIA in southern Mesopotamia, that is, from about 2600 to 2500 B.C.⁷ The consistent style and iconography of the chlorite pieces in large part support his argument. But the production of chlorite objects in this particular style might have lasted longer; it has been suggested, on the basis of stylistic and stratigraphic evidence at Yahya, that at least some of the chlorite objects could have been made as late as 2250 B.C., contemporary with the reign of the Akkadian dynasty.⁸

Decoration of the entire surface with abstract patterns, vegetal and architectural motifs, or natu-

realistic representations of animals and humans is characteristic of the Intercultural Style objects. A tall vase (Fig. 1) having a flat base and sides tapering to a flaring rim, with three alternating bands of stylized palm trees and rounded topped imbricates (an overlapping pattern sometimes interpreted as mountains), is a particularly handsome and well-preserved example. A smaller vase (Fig. 2) of the same shape has a basket- or mat-weave decoration. Other stylized patterns frequently found are the whorl, the beveled square, and the hut or temple façade motif.

In the collection of Norbert Schimmel is a curious object, shaped as a handled rectangle and most often described as a weight (Fig. 3), and carved on one side with three rows of triple twists and on the other with three palm trees like those on the tall vase. The trunks of the palms, transformed at their roots into a wavy pattern evoking water, join at the center. The combination of a twist with a row of trees, trunks conjoined, appears on a similar handled square found early in this century at Nippur, a religious center of southern Mesopotamia during the Early Dynastic period. The only handled square in chlorite or steatite known to have been found in the east is from Soch, in Soviet Uzbekistan. Other examples, perhaps prototypes for these objects, are known in alabaster from Iranian sites.⁹

Representational imagery enlivens other pieces carved in the Intercultural Style. A fine vessel (Fig. 4), on loan to the Museum and reportedly from the region of the Gulf, has a tapering shape similar to objects with repeated abstract patterns described above. Around the body of the vessel, two humped bulls or zebu walk one after the other. Above the animals is the imbricate mountain pattern and below are oblique lines that may suggest water. The humped bull occurs often in these figural chlorite vessels, either alone or with scorpions and elements of landscape. One of the most elaborately decorated of these Intercultural Style vessels, now in the British Museum, has two zebu, shown butt to butt, mounted by a male figure who grasps a wave pattern that emanates from between the bovids' horns in the same way as on our vessel.¹⁰ Both the profile head and

the frontal horns, flanking two protruding bumps, are typical of Intercultural Style representations of the humped bull. The tufts of hair that curl out from the knee joint and hang from the bull's chin on our piece are unusual in this style of stone vessel but are known in earlier Iranian glyptic art.¹¹ In contemporary mid-third-millennium Mesopotamian representations from the Royal Cemetery at Ur, tufts of hair curl from the joints, but they tend to curl behind rather than in front of the foreleg joint.¹² Usually on the chlorite vessels the bull's hump is patterned with semicircular or V-shaped incisions. The use here of inlay on the hump is distinctive and may be characteristic of a particular chlorite workshop. Most frequently the more elaborate pieces of chlorite with inlay come from the western sites—Ur, Nippur, and Bismaya among them.

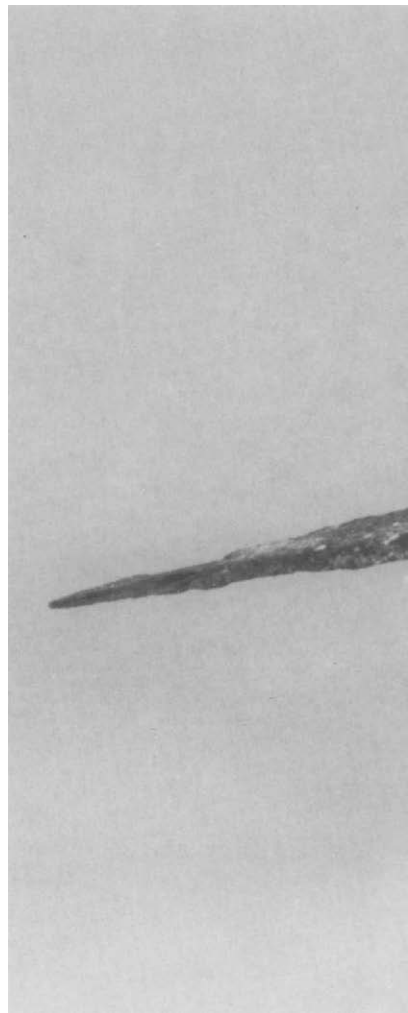
SHAHDAD-XABIS

The other site important to our understanding of the thriving Bronze Age cultures of southeastern Iran is one near the village of Shahdad-Xabis, in an oasis on the western edge of the Dasht-i Lut, that was investigated by an Iranian engineer, Ali Hakemi, during the late 1960s and early 1970s. Until a final account is published it will be impossible to know the cultural sequence of this site, but preliminary reports suggest that the Shahdad Oasis was occupied during much of the third millennium.¹³ The investigations concentrated on a large cemetery site, although a settlement was also identified in the area. Hakemi reports large numbers of metal objects in graves of the richest part of the cemetery, Area A. Most common were simple vessels and tools made of copper or a copper alloy, but objects of precious metals, especially silver, were also found, among them vessels and cylinder seals. Examination of the published burial goods from Shahdad suggests that a substantial and wealthy community in contact with other cultures thrived there during the latter half of the third millennium. Many of the objects found at Shahdad are identical to ones found in western Central Asia. The reasons for this close similarity between artifacts from such distant lands are complex and

are not entirely understood; but to some extent the resemblance must be a reflection of the movement of both people and raw materials from the rich mountain areas in the east to the urban centers in Iran and Mesopotamia.¹⁴

From the Area A cemetery there is an unusual object made of a copper alloy, a square plaque incised with an interesting representation of a ritual ceremony and mounted like a flag or a standard on a bronze pole topped by a spread-winged bird of prey.¹⁵ The Museum's collection includes a bronze bird (Fig. 5) that shares some features with the one on top of the Shahdad standard. The body of the Museum's bird is cast, and each long, curved wing is separately inserted into a slot in the body. Unlike the Shahdad bird, which perches on top of the standard pole, this bird seems to be in flight. It is supported on a pin that runs through its body and is hooked at the top and ridged underneath. The eyes are the only feature indicated in detail. Broad feet dangle beneath the body. The style of each bird is simple, almost naïve.

Another distinctive type of artifact found in Area A of the Shahdad cemetery is a circular, shallow vessel made of a copper alloy with a flat, wide bottom, short, flaring sides, and a thickened rim. On the bottom are animals raised from the metal in relief. Three such plates from Shahdad have been published, one with two rows of fish swimming around the center, one with a scorpion surrounded by fish, and one with caprids recumbent back to back, each with its head turned toward the other.¹⁶ The only other example of a low-sided plate with a known provenance comes from the Burned Building of Level IIIB at Tepe Hissar, a site in northeastern Iran. This one has in its center a relief representation of a lion attacking a bull.¹⁷ The plate from Hissar is identical to those from the Shahdad graves except that the lion's head and neck are raised in three-dimensional relief instead of the low relief of the Shahdad pieces. More provenanced examples are needed before it will be known whether this difference in technique can be used to distinguish between the styles of the two regions. A plate of the same type (Fig. 6) is on loan from Mr. Steven Kossak to the





5

Bird on pin

Copper alloy

H. 5 inches (12.7 cm.)

Purchase, Schimmel

Foundation, Inc. Gift, 1965

65.64



6

Plate with
recumbent bull
Copper alloy
Diam. 9 inches (22.5 cm.)
Lent by Steven Kossak
L.1983.16



Museum. The plate now appears as a flat disc because its rim has broken away; on it a humped bull is sensitively modeled in low relief and carefully detailed with delicately chased lines. The posture of the recumbent humped bull, with one bent foreleg raised and the other, along with both hind legs, tucked under the body, is repeated in the same compact manner on another unprovenanced example of this type of plate.¹⁸

The humped bull on our plate shares certain features with the representations on the chlorite vessels of the Intercultural Style, especially the frontally rendered inward-curving horns flanking two bumps on top of a head shown in profile. Other details are quite different from those of the stone vessels. The modeling of the face is beautifully subtle, particularly the area around the eye and the fleshy part of the muzzle. The linear definition of the haunch and the belly is not seen on the stone vessels but does appear on relief or incised images of animals on vessels reported from western Central Asia.¹⁹ As with other objects from Shahdad, the occurrence of such a distinctive type of plate both in southeastern Iran and at Tepe Hissar, in the north, emphasizes the closeness of the relations between the two regions.

Included in this section on southeastern Iran is a badly corroded shaft-hole axe of a copper alloy (Fig. 7). However, the combined problems of unknown provenance and unparalleled features make this attribution tentative. The symmetrical axe has a splaying blade, an elliptical shaft hole with semicircular outline pierced by rivet holes, and a fan-shaped butt. Both sides are ornamented with low-relief figural decoration, cast as one with the axe. The features of the figures were detailed by chasing that has been partially obscured by corrosion. On one side is a male figure in a smiting posture, with his left hand raised above his head holding a club and his right leg extended and carrying the weight of his body. On the butt is a three-petaled floral form with two leaves emerging from a circular stem. On the other side are two registers: above is a standing figure turning his head back and perhaps raising his left hand in a plea for mercy; below, in front of a tree, is a bound, kneeling prisoner, behind whom is



7

Shaft-hole axe with relief
decoration (both sides)
Copper alloy
L. 6½ inches (16.4 cm.)
Purchase, Mrs. Vladimir S.
Littauer Gift, Anonymous
Gift and Rogers Fund, 1980
1980.307



the upper body of a victim falling headfirst to the ground.

The images on the axe, when both sides are considered, suggest the commemoration of military victory. The smiting figure is the victorious ruler, and the standing figure and bound, falling captives are his vanquished enemies. In Mesopotamia, military victories were often celebrated on monumental carved and inscribed steles set up on public view. One of the most famous of these monuments, even in antiquity, and one that shares numerous features with the axe, is the stele of Naram Sin,²⁰ thought to have been originally displayed in the city of Sippar to memorialize his victory over rebellious tribes in the Zagros mountains. It was so important that it was taken as booty to Susa, in Khuzistan, by the Middle Elamite king Shutruk Nahunte when he successfully campaigned in Babylonia a millennium later. This image of the divine Akkadian king, victorious over his enemies pleading for mercy and falling to their deaths, inspired commemorative rock reliefs in the Zagros mountains during the last centuries of the third millennium.²¹ It is likely that the same imagery also inspired the victory scene illustrated on the copper axe.

The shape of a tool or a weapon can help establish the identity of its makers. In this case, however, there are no axes currently known that have an identical shape.²² Most closely related are the so-called T-shaped axes assigned to eastern Iranian Baluchistan;²³ axes of this shape were found in the Area A graves at Shahdad.²⁴ Like the Museum's piece, these axes are symmetrical, and although none of them are embellished with relief imagery on the blade, several have three-dimensional sculptural decoration on the butt.

When the shape of the axe and its iconography are considered together, it is possible to suggest that it was made in the east under the influence of Akkadian imagery. From the little remaining Middle Bronze Age material culture of the Kerman region, we know that Akkadian iconography was used as a specific source of inspiration for the glyptic art from Shahdad and Tepe Yahya. For example, divine images with grain sprouting from their shoulders, as well as allusions to the

myth of Etana, both prominent features in Akkadian glyptic art, were incorporated into the seal cutter's repertory.²⁵ In a recently published study, Piotr Steinkeller has convincingly suggested, on the basis of numerous textual references, that Akkadians had extensive contact, primarily military in nature, with the lands of Marhashi, which he locates in the region around Kerman.²⁶

Other elements also suggest that this axe was made in the east. The physiognomy of the smiting figure can be compared to male figures from eastern Iran. On the chlorite vessels male figures are depicted with highly developed pectoral muscles and narrow waists similar to those of the figure on the axe. None of the eastern Iranian examples, however, show humans engaged in secular or military activities.

The representation perhaps closest to the image on the axe is preserved for us only in a drawing. It is the scene of a male figure incised on a gold vessel from the treasure of Astrabad, found by chance in 1841 at Tureng Tepe, in northern Iran, and now lost.²⁷ The treasure contained artifacts certainly contemporary with Tepe Hissar Level IIIC, which probably places it no later than in the first centuries of the second millennium. On this vessel a male figure stands not in the smiting posture but in an equally militant one, with a hafted, crescent-shaped axe over his shoulder. It seems from the drawing that the figure is virtually identical to the one on the Museum's axe: each wears his hair bound by a rolled fillet, each has a short beard or stubble on his face, each wears a short kilt, and the massive, powerful chest of each tapers to a wasp waist.

Thus it appears that the Museum's axe has similarities with objects from both the Kerman region and northern Iran. The most that can be suggested by these parallels is that the axe probably belongs to the late third- or early second-millennium Middle Bronze Age and that it may have been made outside Mesopotamia under the influence of imperial Akkadian political iconography. The axe is an important historical document whose meaning may one day be better elucidated by objects whose provenance and purpose are more completely understood.

WESTERN CENTRAL ASIA

The Kopet Dagh mountain chain forms the east-west boundary between the southern highland plateau of Iran and the northern deserts of the Kara and the Kyzyl Kum. Along the piedmont strip of the northern foothills of this formidable mountain barrier, numerous archaeological sites record human occupation that began in the Lower Paleolithic period, more than a hundred thousand years ago, and continues to the present day. The piedmont zone is fertile, covered by alluvial soil deposited by rivers and streams flowing northward from their sources in the mountains to empty into an inland sea or to be absorbed into the desert sands.

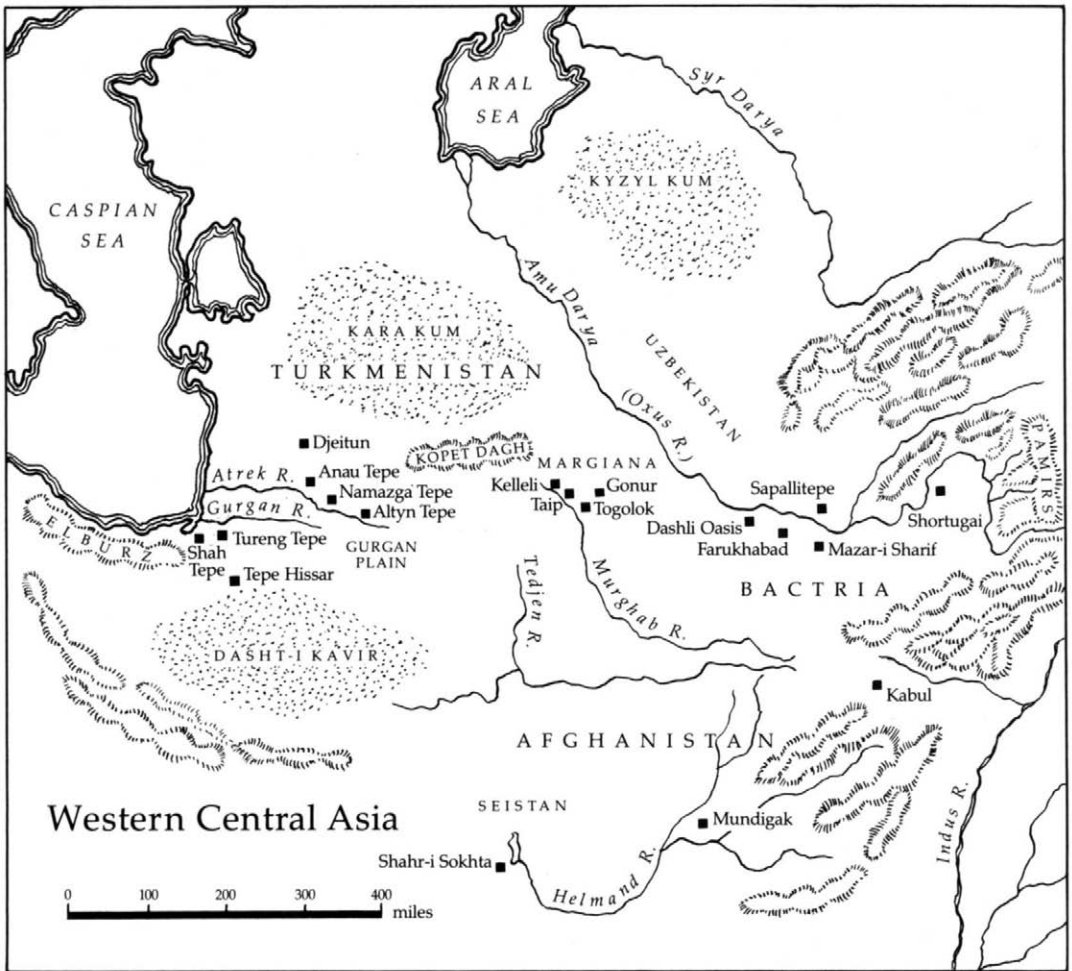
The settlements were most often founded along these rivers or their ancient beds. In the west, the Atrek River system flows out of the mountains into the Caspian Sea. The central region, called the Margiana, is watered by the Murghab and Tedjen rivers, in antiquity both abundant with sweet water laden with alluvium. Farther to the east and still vital today is the major system of the Amu Darya (Oxus River) and the Syr Darya; both flow north-northwest from their headwaters in the Pamir mountain system into the marshy depression of the Aral Sea. These three regions of western Central Asia—now known as Turkmenistan, Uzbekistan, and Afghan Turkestan after the tribes living in each—were sources of water and productive land suitable for both agriculture and grazing, which substantial human populations exploited from the Neolithic period through the Bronze Age.

Archaeological exploration in the western part of the northern piedmont region began early in this

century with the work of the American Raphael Pumpelly at Anau Tepe, in Soviet Turkmenistan, and of the Swede T. J. Arne at Shah Tepe, in the northeastern part of the Iranian plain of Gurgan. In the 1920s, Soviet archaeologists started excavations at the largest site in the region, Namazga Tepe, where B. A. Kuftin made stratigraphic soundings defining the ceramic sequence in the prehistoric periods from the fifth millennium to the middle of the second millennium B.C., when the large city sites of the Turkmenistan region were seemingly abandoned.

The earliest stages of the Neolithic period were not documented at Namazga Tepe but are known from the site of Djeitun, a small village settlement of thirty houses whose inhabitants practiced agriculture and gazelle hunting. The later periods I–III at Namazga Tepe show similar subsistence practices continuing uninterrupted throughout the following Chalcolithic period of the fifth to the late fourth millennium. The Chalcolithic village settlements, as those of the Djeitun period, tend to be located around a larger center near the terminal course of rivers that disappeared into the desert sands. Two Chalcolithic cultural zones have been defined primarily on the basis of the distribution of painted-pottery styles: one includes southwestern Turkmenistan west to the Iranian Gurgan Plain, and the other extends as far east as the Geoksur Oasis.

The first half of the third millennium marks the beginning of the Early Bronze Age culture, the archaeological period known as Namazga IV. At that time the rather evenly distributed population of the Chalcolithic period began to agglomerate in a few larger villages, especially Namazga Tepe and Altyn Tepe, which later became major centers of urban life. The craft production centers now tended to be separated from the domestic quarters, and craftsmen began to use more advanced techniques of manufacture that required specialized training. For example, the potter's wheel and large two-tiered firing furnace replaced handwork and the small firing kiln. Metallurgy also expanded and stone carving became more sophisticated; various items of jewelry and large quantities of vessels were made of hard stones. It was during this period that seals



used to indicate ownership began to replace carved amuletic stones!¹

This proto-urban culture continued its evolution during the Middle Bronze Age. The large towns of Namazga Tepe period V and Altyn Tepe Levels 3–1 grew into cities of truly urban proportions, covering 170 and 75 acres respectively. Excavations, especially at the site of Altyn Tepe, exposed numerous sectors with specialized functions. The ceramic-production quarter was expanded and equipped with the fast wheel that quickly produced fine, highly standardized vessels in a large variety of shapes. At Altyn Tepe an elaborate metallurgical industry flourished on the southern edge of the city. The residential quarters were also segregated: the wealthy lived in large domestic dwellings

organized around central courtyards, the poor in another quarter, in smaller, less well built houses. The most substantial monumental structure uncovered at Altyn Tepe is a staged platform compared by its excavators to the Mesopotamian ziggurat, or stepped temple tower, with the house of the divinity on top. A tomb close to the platform is identified as that of priests and the objects in it as ritual paraphernalia, including golden heads of a bull and a wolf; small oval silver plates; beads of lapis lazuli, turquoise, and carnelian; a handled stone disc; and a miniature column.²

The chronology of the Namazga sequence in western Central Asia has been the subject of much discussion. Although later dates have been proposed, those accepted here for the Bronze Age periods, Namazga V and early VI, are summarized by Philip Kohl in his introduction to *The Bronze Age Civilization of Central Asia*, a volume of English translations of articles by Soviet scholars. This chronology, based primarily on carbon-14 dating, puts the beginning of the urban period at about 2600 B.C. and its end at the turn of the third to the second millennium B.C.³

During the late 1960s and 1970s, Soviet archaeologists continued their western Central Asian investigations and extended them more than six hundred kilometers east, as far as the foothills of the Pamir mountain system. In the Margiana region of the Murghab and Tedjen river basins they conducted controlled surveys and soundings over a large number of sites, including Kelleli, Gonur, Taip-depe, and Togolok in the northern delta of the Murghab River.⁴ Farther to the east, in the system of oases in the region north of the towns of Balkh and Mazar-i Sharif, intensive investigation included excavations at three sites in the Dashli Oasis by Viktor Sarianidi.⁵ In southern Uzbekistan A. Askarov excavated at Sapallitepe,⁶ on the Amu Darya, and at the interesting site of Shortugai, on a stream high in the western Pamirs, the French archaeologist Henri Francfort has made important discoveries.⁷ Before these eastern investigations, some scholars thought that this region was virtually uninhabited before the fifth century B.C., when it became the twelfth satrapy of the Persian Empire and was called

Bākhtri in Old Persian; this ancient term, Bactria, has been revived by archaeologists studying the Bronze Age to describe this region.

The material culture of these eastern settlements in Margiana and Bactria is closely related to that of the late Namazga V period known to the west, in Turkmenistan. Among the features that distinguish these eastern settlements from their western counterparts are the large numbers of fortress sites with towers and enigmatic structures interpreted as sacred buildings, perhaps fire temples, by Sarianidi in his reports on the excavations at Dashli;⁸ a particular type of stone seal amulet, carved on both sides with distinctive motifs (examples of these will be discussed below) is also particular to Margiana and Bactria.⁹ Most scholars now think that these eastern regions were widely settled for the first time beginning in the late Namazga V period, probably by people coming from the urban centers in Turkmenistan, and that these settlements continued to thrive through the early centuries of the second millennium B.C.¹⁰

In 1977, in a volume describing in detail what is known of the ancient farming cultures of Afghanistan from the earliest times through the Iron Age of the first millennium B.C., Sarianidi reports on the excavations he conducted at the mound sites of Dashli 1, 2, and 3.¹¹ There he describes the various burial practices of the Bronze Age people. Graves were dug in existing dwellings, below actual living floors; in already abandoned settlement areas; or in cemeteries removed from the habitation sites altogether. At the Dashli sites, over half the burials were in pits covered with bricks. Fractional burials and cenotaphs were also recorded. Some of the Bronze Age cemeteries removed from settlements are apparently extremely large. Unfortunately, none of these have been properly excavated, but they were widely pillaged, particularly in the early 1970s. Sarianidi visited these plundered grave sites at Farukhabad 1 and 2 as well as two graveyards in the Dashli Oasis. From the disturbed remains he concludes that many of the graves were deep, catacombl-like pits with niches at their bottoms. He has published, both in the volume already mentioned and in numerous articles, many



objects reported to have been found in these graves. These objects first appeared in the antiquity shops in the bazaar in Kabul, and from there they went to shops in the West.¹² Much of the material presented here is similar to that recorded by Sarianidi. It is likely that most of it came from these cemeteries in the region of ancient Bactria.

The Bronze Age inhabitants of western Central Asia buried their dead with a variety of goods, including ceramics and objects of stone and metal. Those in copper, alloyed most often with lead and arsenic (according to the few available analyses) and less often with tin, were almost always cast. Some are in silver and, more rarely, gold; as might be expected, these precious metals were used for the finer, more carefully executed pieces.

Most of the objects presented on the following pages are of metal, although a few are of stone or a composite material. All of them have features that con-

The Koh-i Baba mountain range, from on the road to the site of Bamiyan, about 200 miles northwest of Kabul.



8

Mirror with incised handle
Copper alloy
H. 10¾ inches (27 cm.)
Lent by Steven D. Robinson
L.1979.44.125

nect them to the Namazga V and early Namazga VI culture, which flourished from the Atrek River Valley to the western Pamirs during the period from around 2500 through the first half of the second millennium B.C. Because these objects have no recorded provenance or specific archaeological context, it is impossible to differentiate them within these extensive chronological and geographical limits. Consequently they must be presented here according to type rather than to region, date, or original cultural context.

MIRRORS

Mirrors are abundant among the ancient Bactrian grave goods. Most are cast of copper or a copper alloy, but more elaborate examples in silver are occasionally recorded. There are two known types of mirrors: a simple one with a plain, slightly convex reflecting disc and a handled one, also with a convex disc. The handled mirrors vary considerably: some have a plain handle cast together with the disc; others have the handle cast on, in which cases the handle is more elaborate and has been interpreted either as a female figure with her hands on her hips¹³ or as a date palm tree with hanging branches.¹⁴

Although a few handles may indeed show female figures, many of them seem to represent palm trees. This is certainly true of the mirror in the Museum, where the handle is decorated on both sides with a chevron pattern imitating the bark of the trunk (Fig. 8). Above the curved, pendant branches there is an incised sign similar in appearance to those that occur on the pottery and the figurines of the Namazga V period. We do not know the meaning of any of these signs, but the fact that such signs occur on various types of objects suggests that their meaning was widely understood.

Outside western Central Asia, only one example of this type of mirror has been found, in a grave of the Kulli culture at the site of Mehi, in Pakistani Baluchistan.¹⁵ Because of the large number of examples associated with Central Asia, it is likely that the isolated one from Mehi was brought from the north.

SMALL ANIMAL FIGURINES

Animals were a favorite subject of the craftsmen of western Central Asia. Portrayals of beasts, more often wild than domesticated, enliven almost every type of object found in the Bronze Age tombs, with the notable exception of ceramic vessels. Either occurring as a complete representation or abbreviated as a protome, these animals often decorate objects that have a utilitarian function: containers, weapons, pinheads, and the like. Less often, small figurines of animals stand independently on flat rectangular bases.

Three such small animals are nearly identical images of mountain sheep (Fig. 9a–c). Although their surfaces are badly corroded, it is still possible to discern that their long, shaggy coats and heavy chest hair were naturalistically rendered in fine detail. A striding Bactrian camel (Fig. 10) also belongs to this group; it is about the same size as the other figures and is as realistically modeled, almost certainly from actual observation of the animal. Another figure of a camel (Fig. 11), larger and more stylized, probably also comes from Bronze Age Bactria. The differences in style between these two camels suggest that they were made either in different workshops or at different times within the Middle Bronze Age.

It is not surprising that the Bactrian camel, distinguished by its two humps, appears in the artistic repertory of western Central Asia, its native habitat. The distinctive features of the Middle Bronze Age renditions of this animal are the articulation of masses of hair at the top of the forelegs, on the front of the neck, at the base of the neck, and at the top of the head, and the way the short tail curls up to join the rump. Both figures of a camel have these traits, even though the style of the smaller one is more naturalistic.

In a study of the seal amulets of the Murghab style, Sarianidi describes a metal stamp seal reportedly found in the Dashli Oasis.¹⁶ A two-humped camel facing a small human figure is engraved on the seal, whose stepped, cruciform shape is typical of Bronze Age stamp seals of western Central Asia. The camel takes a pose identical with that of the larger figurine, its



a



b

9

Figurines of mountain sheep
Copper alloy

a H. 1 $\frac{5}{8}$ inches (4.2 cm.)

Lent by Steven D. Robinson

L. 1979.44.107

b H. 1 $\frac{7}{8}$ inches (4.8 cm.)

Gift of Steven D. Robinson, 1981

1981.448.18

c H. 1 $\frac{3}{4}$ inches (4.6 cm.)

Gift of Steven D. Robinson, 1981

1981.448.17



c



10

Bactrian camel figurine
Copper alloy
H. 1 $\frac{5}{8}$ inches (4.2 cm.)
Lent by Steven D. Robinson
L.1979.44.105

11

Bactrian camel figurine
Copper alloy
H. 3 $\frac{7}{16}$ inches (8.7 cm.)
Rogers Fund, 1953
53.117.1



head raised and feet pulled together. Details of the hair masses are also the same, with the neck hair horizontally striated and bunches shown at the base of the neck and at the top of the foreleg. Ceramic figurines of two-humped camels were also found by Sarianidi in his survey of the Margiana sites, and one of them has the same distinctive horizontal striations on the mane.¹⁷

The function of such miniature sculptures is not known. The smaller, naturalistic ones, the mountain sheep and one camel, are solid and have been cast together with their bases, while the larger camel is partially hollow and has been attached to its base. Small, three-dimensional figurines are sometimes found attached to the backs of mirrors;¹⁸ it is unlikely, however, that these figurines were so placed, for their bases show no sign of previous attachment or of extensive wear.

COSMETIC CONTAINERS

More common than animal figurines are small theriomorphic containers for cosmetics. Predictably, wild animals, usually sheep, goats, or caprids, are the most numerous; occasionally, domesticated bovids, monkeys, or even human figures occur. All the containers are small, and all held precious cosmetic preparations, most likely black paint made of a lead-based paste. Many of them still contain a white, powdery, oxidized residue of the ointment.¹⁹

The style of the figures varies. Some are quite realistic and rendered with careful attention to detail; others are much more schematic. Those in the Museum's collection tend to be schematic, with their bodies sculpted in broadly modeled masses. As is often the case in the art of the ancient Near East, attention is drawn to the most distinctive feature of the animal either by exaggerating its size or by providing it with greater visual interest. This is obvious in the figure of the recumbent caprid (Fig. 12), which can be identified as a markhor by its undulating and striated horns. The rest of the figure is amorphous; the weakly defined legs are tucked under the undifferentiated body. The same is true of the mouflon (Fig. 13), whose large spiral horns



12

Recumbent horned animal
figurine with tube on back
Copper alloy
H. 2 $\frac{3}{8}$ inches (6 cm.)
Lent by Steven D. Robinson
L.1979.44.112



13

Mouflon figurine
with hole in top of head
Copper alloy
H. 3 inches (7.8 cm.)
Lent by Steven D. Robinson
L.1979.44.109

and protruding chest hair stand out against the smooth lines of the body.

These objects functioned as containers in two ways: either an opening was cast into the head, or a tube was extended above the back of the animal. Some have, cast on the side, a loop that would have secured the applicator stick to the vessel by a chain or a cord.

More common than the theriomorphic containers are the small bottles with tall cylindrical necks. Usually they are made of cast copper alloy, but occasionally such bottles are silver.²⁰ The bottle takes several different shapes. Particularly pleasing is the heart-shaped variety (Fig. 14), which has high shoulders and a pointed bottom resting on a flat base. Other bottles have a biconical body with a sharp carination in the center (Fig. 15). Protomes of mountain sheep with their boldly curling horns sometimes decorate the bodies of the vessels (Fig. 16). Some forms have full bodies of recumbent sheep with their heads turned out. Snakes undulate around the centers of others.

Examples of these distinctive cosmetic containers have been found at a number of sites in Middle Bronze Age contexts including Tepe Hissar; Mohenjo Daro, in the Indus Valley; and Moghul-Ghundai.²¹ But their highest concentration is in western Central Asia, where they have been found at Anau, Altyn Tepe, and Sapalli,²² as well as among the plundered burial goods. It is likely, therefore, that this region was the source of the isolated examples distributed at other sites.

Cosmetic containers carved from steatite or chlorite occur alongside those of metal, but in different shapes and with different decorative schemes. The square bottle with short cylindrical neck is a common shape among the Bactrian finds (Fig. 17). The sides are decorated with geometric motifs such as the hatched pendant triangle on the illustrated example; others have more elaborate figural decoration showing rampant caprids, pipal leaves, tulips, or snakes.²³ A ceramic composition material called faience was used, along with chlorite and steatite, for kidney-shaped, crescent-shaped,²⁴ and compartmented boxes (Fig. 18), as well as for palettes with short legs. All of these items were part of an ancient beauty's toilet kit.



14

Heart-shaped bottle
and applicator
Copper alloy
H. $3\frac{5}{8}$ inches (9.2 cm.)
Lent by Norbert Schimmel
L.1983.119.23



15

Bottle

Copper alloy

H. 2¾ inches (6.9 cm.)

Lent by Steven D. Robinson

L.1979.44.113

16

Bottle with animal protomes
and applicator

Copper alloy

H. 5 inches (12.5 cm.)

Lent by Steven D. Robinson

L.1979.44.127



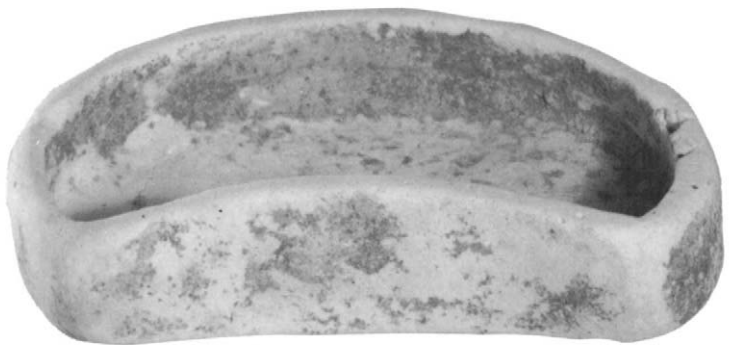


17

Square container
with incised decoration
Chlorite or steatite
H. 2¼ inches (5.8 cm.)
Lent by Steven D. Robinson
L.1979.44.83

18

Crescent-shaped box
Faience
L. 3 inches (7.8 cm.)
Gift of Steven D. Robinson,
1982
1982.445.10

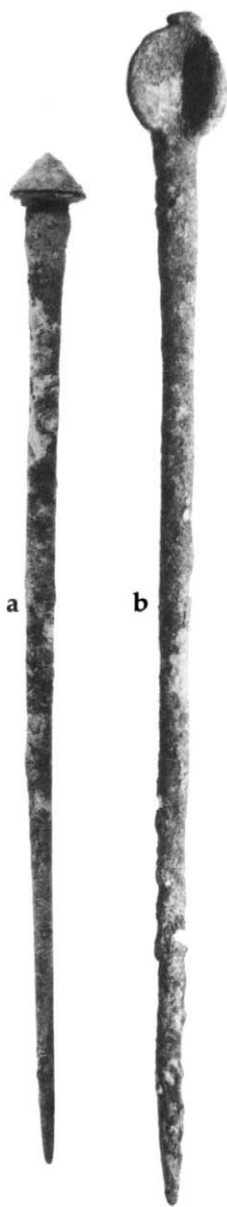


PINS

Some of the cosmetic containers still have their original applicator sticks left inside or corroded to the rim. The tops of these applicator sticks, made of a copper alloy, silver, or stone, are usually decorated with either an abstract or a representational form. Caprids, fully rendered or in protome, seem to be the most common (see Fig. 14), but a wide variety of other creatures also bedeck these toilet utensils.²⁵

Garment pins, abundant in Bactria as in the rest of the Near East, also have decorated tops and are distinguished from the applicators by their greater length and their pointed rather than bulbous tips. Often they have heads that terminate in simple geometric forms—discs, intersecting ovals, spirals, or cones (Fig. 19a,b). Others (Fig. 20a–c) have more elaborate geometric or floral patterns on their tops, similar in form to the larger compartmented stamp seals discussed below; these compartmented discs occur on top of the pins either singly or in pairs. The formal similarity of the pinheads to the so-called stamp seals suggests that the meanings, and perhaps functions, of the two types of design were somehow related. The tops of garment pins were ornamented as well with figures of animals. Once again, the horns of caprids are given special attention on a particularly splendid example (Fig. 21) with two markhors lying back to back on the top of a sphere; their horns spiral upward to a length almost one and a half times that of their bodies—impossible in nature, but an effective artistic convention. The resting bodies of these beautiful creatures, sensitively sculpted, are similar to that of an example found at Shortugai.²⁶

Such garment pins, with their various forms of theriomorphic embellishment, have been frequently recorded in controlled excavations. They have been found in western Central Asia in Turkmenistan at Altyn Tepe; examples were discovered in the east at Dashli and Sapalli, as well as at Shortugai. In north-eastern Iran, elaborate examples came to light in Level IIIC of Tepe Hissar, and in the Indus Valley, zoomorphic pins are known, from Mohenjo Daro and Harappa.²⁷



19

Pins

Copper alloy

a L. 5½ inches (13 cm.)

Gift of Steven D. Robinson,
1981

1981.448.13

b L. 6½ inches (15.7 cm.)

Lent by Steven D. Robinson
L.1979.44.92



20

Pins
Copper alloy

a L. $9\frac{3}{8}$ inches (23.8 cm.)
Gift of Steven D. Robinson,
1981
1981.448.14

b L. $4\frac{7}{8}$ inches (12.3 cm.)
Lent by Steven D. Robinson
L.1979.44.89

c L. 9 inches (22.8 cm.)
Lent by Steven D. Robinson
L.1979.44.99

21

Pin with two recumbent
horned animals on head
Copper alloy
L. 5 inches (12.7 cm.)
Lent by Steven D. Robinson
L.1979.44.86



22

Seated female figurine
Chlorite or steatite
and marble
H. 3¾ inches (9.5 cm.)
Lent by Norbert Schimmel
L.1983.119.21



SCULPTURE

The evidence now available indicates that representational sculpture in stone was rare in western Central Asia during the Middle Bronze Age. The only three-dimensional images known, unfortunately none documented by excavated examples, are of a female figure seated or squatting on a platform and wearing an enveloping robe decorated by a pattern imitating sheep's fleece. They are always made of a combination of stone, steatite, or chlorite for the garment and headdress, and white calcite for the head and, if they exist, the hands and feet.²⁸

One of these seated females, in the Norbert Schimmel collection, is in the familiar abstract form, her armless body a thin rectangle and her folded legs a protruding ledge (Fig. 22). Her facial features and round ears are strongly stylized, giving her a stark, anonymous appearance. Wavy lines on top of a green

turban wrapped around her head indicate the hair underneath.

The seated female figure in a voluminous skirt appears in the glyptic art of southeastern Iran from Shahdad, as well as on a silver vessel said to have been found in the province of Fars, in southwestern Iran,²⁹ both assigned to the latter half of the third millennium, around the time of the Akkadian Empire. The motif occurs later on Iranian cylinder seals. A number of clay impressions of cylinder seals with this same female figure have been found at Tall-i Malyan, ancient Anshan, in Fars; and at Susa, in Khuzistan. These are dated by stratigraphic and epigraphic evidence to the dynasty of the Sukkumahu (c. 1900–1450? B.C.).³⁰

The identity of the female figure seems to vary. In the earlier glyptic representations in southeastern Iran she could be divine, shown with grain growing from her shoulders. On some of the later examples from Anshan and Susa, in the west, the female figure seems to be mortal, while on others she is seen holding an overflowing vase or seated under a canopy or a bough and attended by horned beings suggesting her divinity. In western Central Asia, she appears in sculpture, perhaps as a version of the female figure seen on the compartmented stamp seals wearing a robe flounced at the bottom and a turban wrapped around her head, and sometimes flanked by or seated upon animals or mythical creatures.³¹ If so, these attributes could also indicate a divine quality to her nature.

On a plaque carved from a similar greenish stone, either steatite or chlorite, is a charming image of a tiger climbing on mountains (Fig. 23). The beast is rendered in relief, with its turned head sculpted fully in the round. Such relief sculpture is unusual for Central Asia: the only other published examples are a fragment of a steatite plaque from Margiana³² with a low-relief image of a recumbent bull and a few small fragments of floral and figural decoration for a “mosaic” found at Dashli Tepe.³³

The tiger, identified by its flamelike stripes, is rarely seen in the art of Mesopotamia or Iran but commonly appears in the intaglio seal designs of the Indus Valley culture.³⁴ The closest comparison with the tiger is



23

Lion plaque
Chlorite or steatite
L. 1⅜ inches (3.6 cm.)
Lent by Norbert Schimmel
L.1983.119.24

the feline on an impressive bronze axe with silver inlay reportedly from the North-West Frontier Province of India in the British Museum, described below in relation to a silver-gilt axe.³⁵ Both have stripes indicated by an interlocking S-pattern. Details of the facial structure are also the same, especially the round cheeks flanking the wedge-shaped nose.

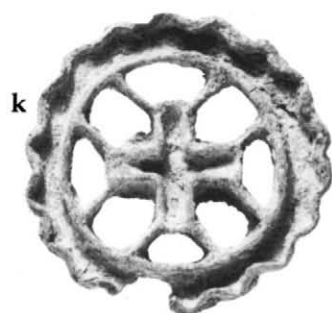
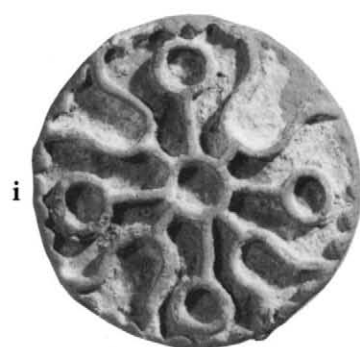
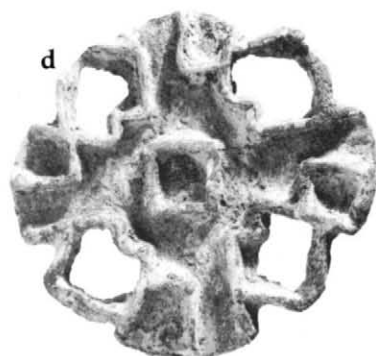
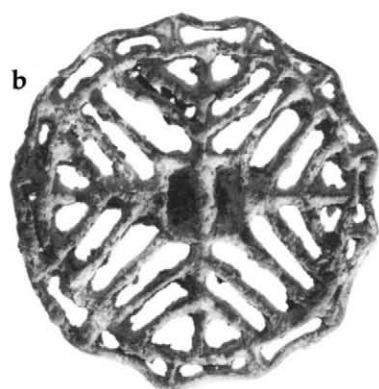
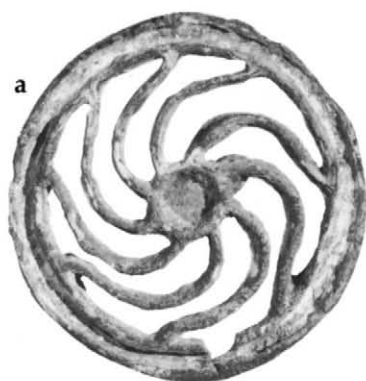
The alternating rows of doubly outlined nipple patterns suggest closer and more distant peaks in a mountain chain. This particular rendering for mountains occurs early, in the glyptic art of the Proto-Elamite period in western Iran. Among the steatite objects from western Central Asia it occurs at least once, on a vessel (or possibly a mace head), above two rows of an interlocking S-pattern called a *guilloche*.³⁶ The small pieces of gold foil that remain at the edges of the tiger plaque are unusual and suggest that the roughened background was originally covered in gold. Different-colored materials are commonly used to enliven an image in the art of western Central Asia. Gold foil and rivets, and silver inlay accent metal objects; white stone is combined with green to differentiate skin from garments. Gold foil was possibly used more extensively in combination with steatite or chlorite than has been previously realized. Most of it would have been removed, either in antiquity or in modern times, because of its high value.

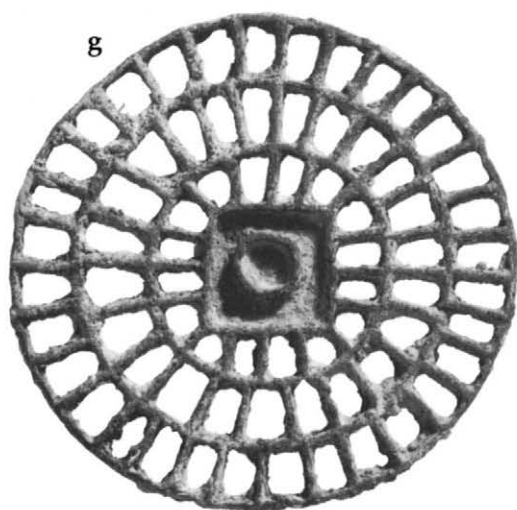
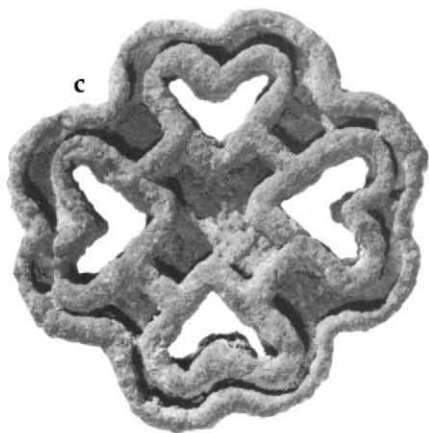
GLYPTIC ART

By the Early Bronze Age, a tradition of seal and amulet carving was well established in western Central Asia. At Altyn Tepe Levels 8–4, seals are usually square, lozenge-shaped, or circular stones with geometric patterns cut in the surface by a gouging or a drilling tool. Such carved stones have been found outside western Central Asia in Early Bronze Age levels of sites in southern Afghanistan and Iranian Seistan.³⁷ The extent to which these early carved stones were used as actual seals denoting ownership of property is uncertain. Ancient impressions on clay do exist, but their small numbers suggest that an amuletic or symbolic function may have been as important as the economic one.

This craft expanded during the Middle Bronze Age to include metal compartmented stamp seals, as well as stone stamp seals of different shapes and stone cylinder seals decorated in intaglio with geometric, floral, or representational patterns. These compartmented seals were cast, probably by the lost-wax method, most commonly in a copper alloy, although examples are known in silver and, rarely, even in gold. They are flat and have square, round, or figural outlines; their backs are either opened or closed, with a geometric or representational design created by perpendicular strips of metal forming the compartments from which their name derives. The back, rarely decorated with relief or incisions, always has, in the middle, a triangular or squarish suspension loop; many of these show extensive signs of wear caused by the abrasion of a cord.

Prototypes in stone of these compartmented stamp seals first appear during the late levels of the Namazga IV period at Altyn Tepe, together with the drilled stone seals. The metal variety appears during the urban period V, becoming increasingly popular during later Namazga V and VI³⁸ and disappearing sometime toward the end of period VI. Compartmented stamp seals are widely distributed throughout Iran, where isolated examples are found as far west as the site of Susa, in Khuzistan. In eastern Iran, at Shahdad, such seals are found along with impressions of this type of seal on the lower bodies of pottery jars, together with incisions interpreted as potters' marks.³⁹ The overwhelming majority of these stamp seals, however, come from the western Central Asian excavations and plundered graves, suggesting that this region was where they were made. V. M. Masson and Sarianidi report seals of this type at Altyn Tepe in graves, where they are always found near the pelvis, indicating that they were perhaps suspended from a belt worn around the waist.⁴⁰ It may be possible to go one step further and suggest that it is the compartmented stamp seals that are seen dangling from the belt of the strange male statuette said to have been found in the Iranian province of Fars and which is now in the Louvre.⁴¹ Could it be that this is a representation of a man from





24

Compartmented stamp seals
Copper alloy

a Diam. $1\frac{7}{8}$ inches (4.7 cm.)
Lent by Steven D. Robinson
L.1979.44.1

b Diam. $1\frac{7}{8}$ inches (4.8 cm.)
Purchase, Mrs. Vladimir S.
Littauer Gift, 1978
1978.261.6

c Max. l. 2 inches (5.1 cm.)
Purchase, Mrs. Vladimir S.
Littauer Gift, 1978
1978.261.5

d Diam. $1\frac{7}{8}$ inches (4.8 cm.)
Gift of Steven D. Robinson,
1982
1982.445.5

e Diam. 2 inches (5.1 cm.)
Lent by Steven D. Robinson
L.1979.44.79

f Diam. $1\frac{3}{4}$ inches (4.5 cm.)
Purchase, Mrs. Peter Oliver
Gift, 1978
1978.261.2

g Diam. $2\frac{3}{4}$ inches (6.9 cm.)
Lent by Steven D. Robinson
L.1979.44.28

h Diam. $2\frac{7}{8}$ inches (7.3 cm.)
Lent by Steven D. Robinson
L.1979.44.26

i Diam. $1\frac{3}{4}$ inches (4.4 cm.)
Lent by Steven D. Robinson
L.1979.44.11

j Max. l. 2 inches (5.1 cm.)
Lent by Steven D. Robinson
L. 1979.44.6

k Diam. $1\frac{5}{8}$ inches (4 cm.)
Gift of Steven D. Robinson,
1982
1982.445.3

l Max. l. $2\frac{1}{16}$ inches (5.1 cm.)
Purchase, Mrs. Vladimir S.
Littauer Gift, 1978
1978.261.4

Central Asia who wore these seals on his belt as a symbol of membership in a particular clan or tribe?

The largest group of these compartmented stamp seals has geometric designs based upon a cross joined at the edge of the seal by straight, curved, or scalloped strips of metal (Fig. 24a–l). The outlines of some are round, others square; most are cruciforms with stepped crenelations, an extremely long-lived form in Central Asia that first appears in the painted pottery of the Early Chalcolithic culture. Other such geometric seals are based on a central circle from which petals radiate, lines swirl, and scallops curve, or on a grid pattern of intersecting lines.

Compartmented stamp seals also have figural designs, among them spread-winged birds of prey with profile heads, coiled snakes, and caprids with curving horns (Fig. 25a–e). Those with more elaborate imagery show humanlike figures, male or female. Sometimes winged or bird-headed, they are shown standing, flanked by animals; enthroned on stools (Fig. 26a); or sitting on the backs of coiled snakes or winged dragons. Each of these figures may represent a member of the western Central Asian pantheon.

Another humanlike figure is represented in a bolder style (Fig. 26b). It is a male figure, divine if the meaning of the horned headdress is similar to that in Mesopotamia or Iran. He is dressed in a short kilt and wears mountain boots with upturned toes. Representing either lightning shafts or, more arguably, snakes, arrow-shaped forms emerge from his shoulders and from under his right arm. The asymmetrical outline, combined with the unusual iconographic features, set this compartmented seal apart from the others.

Compartmented stamp seals in silver are known from western Central Asia. At Altyn Tepe, a silver seal of a striding feline with three animal heads was found in the tomb of a priestess.⁴² Another example, from Bactria, shows a bird-headed demon seated on a snake.⁴³ Illustrated here is a silver seal with three birds' heads alternating with tails, all surrounded by a guilloche (Fig. 26c). A similar seal, but in a copper alloy, was found on the surface of a late Namazga V mound in the Kelleli Oasis, in the Margiana region.⁴⁴

25

Compartmented stamp seals
Copper alloy

a Max. l. 2¼ inches (5.5 cm.)

Lent by Steven D. Robinson
L.1979.44.2

b Diam. 1½ inches (3.8 cm.)

Purchase, Mary C. Reed Gift,
1978

1978.261.1

c Diam. 1½ inches (3.8 cm.)

Lent by Steven D. Robinson
L.1979.44.7

d Diam. 1¾ inches (4.3 cm.)

David L. Klein, Jr. Memorial
Fdn., Inc. Gift, 1984

1984.3

e Diam. 2¾ inches (6.9 cm.)

Lent by Norbert Schimmel
L.1983.119.25

26

Compartmented stamp seals

a Copper alloy

Diam. 1⅞ inches (4.6 cm.)

Lent by Steven D. Robinson
L.1979.44.32

b Copper alloy

Max. l. 3⅝ inches (9.1 cm.)

David L. Klein, Jr. Memorial
Fdn., Inc. and Lester Wolfe

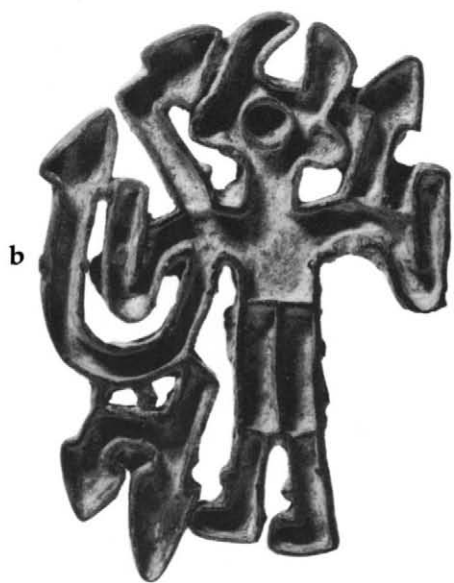
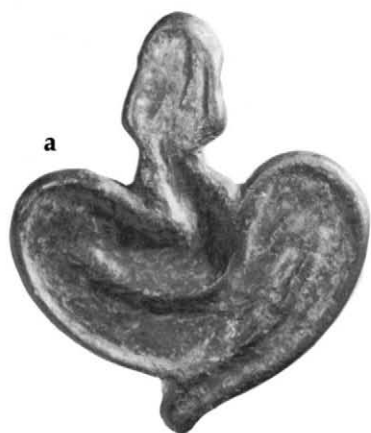
(by exchange) Gifts, 1984
1984.4

c Silver

Diam. 2¼ inches (5.8 cm.)

Lent by Steven D. Robinson
L.1979.44.22





Stamp cylinder seal
(inverted impression, right)
Chlorite or steatite
H. with loop $1\frac{1}{16}$ inch
(1.8 cm.)
Lent by Martin and Sarah
Cherkasky
L.1983.125.4



Seals made of stone are not common in the Namazga V levels of the city sites in Turkmenistan. To the east, however, in the region of Margiana and in Bactria, a new type of stamp-seal amulet was found in surveys and in excavations of sites dated to the early Namazga VI period on the basis of ceramics. Cylinder seals and two impressions on ceramic jar fragments were also found at the site of Taip-depe, in the lower Murghab Delta.⁴⁵ Both of these seal types, engraved with animals and plants, add a new dimension to the elaborate tradition of glyptic art already known to exist in western Central Asia.

A drilled style and an engraved style were used for images on these stamp and cylinder seals. The drilled style rendered images with small, overlapping hemispheres on both the stamps and the cylinders. The stamps found in large numbers at Sapalli and in the Bactrian graveyards are either discs or cruciforms with stepped crenelations. Both sides are flat and are engraved with drilled patterns.⁴⁶ The cylinders, so far reported found only in the Margiana, are small and have a suspension loop at the top; the bottom is flat and often has a drilled floral design, which transforms the seals into stamp cylinders, a type popular a millennium later among the Urartians in northwestern Iran and eastern Turkey. The designs on the sides of the stamp cylinders are most often animals. Formed by tiny drillings or by gouging, the figures are freely distributed over the surface.⁴⁷ On the example of the drilled style illustrated here (Fig. 27), from the Cherkasky collection, a caprid faces right; to its left and floating in the field is a small, unidentified creature followed by a boar, placed along the vertical axis. The undulating lines above and below the boar are probably snakes.

A distinctive style of engraving that indicates

the animals' bodies by flat surfaces detailed by deeply incised lines is used most often for stamp seals from Margiana. Rare examples of it on cylinder seals are known. One such cylinder has been published by Pierre Amiet,⁴⁸ who notes that there is a close formal relationship between the style of these engraved seals and the classic glyptic style of the Proto-Elamite culture, which flourished in lowland and highland Iran at the beginning of the third millennium B.C., with centers at Susa, in Khuzistan, and Tall-i Malyan, in Fars, and outposts as far east as Tepe Yahya and perhaps Shahr-i Sokhta. Although these glyptic styles, widely separated in space and time, share certain formal traits, all evidence currently available points to a date for the examples from Margiana almost a millennium later, during the late Namagza V and early VI periods.

Three stamp seals from the Cherkasky collection are excellent examples of this engraved style, which is documented particularly in the Murghab region.⁴⁹ They are rectangular, with convex sealing faces and a suspension hole drilled longitudinally through the center. Some of the engraved motifs are also known on the metal compartmented stamp seals.

The smaller seal (Fig. 28) has a winged dragon on one side and a snake coiled behind a plant with a round blossom and two large leaves on the other. On one of the larger stamps (Fig. 29a) the winged dragon with tail raised strides toward a branch or tree on one side, and on the other a hero dominates writhing snakes. The hero is nude except for his upturned boots; he has a short beard and closely cropped hair held in place by a band. Undulating wings emerge from his powerful shoulders.

The winged dragon frequently appears on these stamp seals, often in association with snakes. In one example published by Sarianidi, the winged dragon attacks a bovid. On the other side a dominating hero is carved. This suggests that the winged dragon is a malevolent force, whose evil power is threatening the livelihood of the people and is mastered by the hero.

Another stamp seal (Fig. 29b) has a boar striding amid blooming tulips with leaves on one side and a bird of prey spreading its wings diagonally across the



28

Two-sided stamp seal
(impressions below)
Chlorite or steatite
Max. l. 1 inch (2.6 cm.)
Lent by Martin and Sarah
Cherkasky
L.1983.125.1



a



b



sealing surface on the other. It is possible that the crossed lines appearing above the tail are feet drawn close to the body. The iconographic elements of these two larger stamp seals—the winged hero, the fierce dragon, the boar, and the bird—recall the drama enacted on the surface of a spectacular silver-gilt axe, a product of the same cultural world (see Fig. 36).

PRECIOUS METAL VESSELS

Vessels of precious metal—gold, silver, and electrum (an alloy combining the two)—were made during the Bronze Age, perhaps for use in ritual ceremonies or as symbols of status for members of the ruling elite. All the way from the western Caucasus to eastern Afghanistan, hoards or isolated examples of such valuable vessels have been found and recorded at the sites of Maikop, Tureng Tepe (the Astrabad Treasure), and Tepe Hissar, as well as near Fullol, a village some two hundred kilometers southeast of Mazar-i Sharif.⁵⁰ The majority of the vessels from all of these sites are plain, but some are embellished with repoussé or chased decoration of geometric patterns, files of animals, and humans engaged in various activities.

Among the reported finds of precious metal vessels from the region of Bactria are cups of silver and electrum in shapes virtually identical to those of ceramic vessels of late Namazga V and early Namazga VI date. A footed goblet (Fig. 30, left), expertly hammered from a thin silver sheet, has in the middle of its stem an unusual horizontal carinated projection that adds elegance to its form while making it easier than its ceramic counterparts to hold.

Another silver vessel (Fig. 30, right), perhaps a mate to the goblet, is almost identical in shape to cups made of fine buff ceramic found in excavations at Sapalli and in the Dashli Oasis.⁵¹ It has a narrow, slightly indented base from which the sides flare to a wide mouth; the plain rim is accented by a simple horizontal indentation. A number of identical vessels, also in silver, have been seen in the bazaar of Kabul; one in copper was also found by Hakemi in the Area A graves at Shahdad.⁵²

29

Two-sided stamp seals
(impressions below)
Chlorite or steatite

a Max. l. $1\frac{7}{8}$ inches (4.7 cm.)
Lent by Martin and Sarah
Cherkasky
L.1983.125.2

b Max. l. $1\frac{13}{16}$ inches (4.6 cm.)
Lent by Martin and Sarah
Cherkasky
L.1983.125.3



30

Goblet and cup

Silver

H. of goblet (left) $4\frac{1}{2}$ inches (11.5 cm.), of cup, $5\frac{3}{8}$ inches (13.5 cm.)

Gift of Mr. and Mrs. Norbert Schimmel, 1982

1982.140.1,2



A vessel of the same shape in the Norbert Schimmel collection is made of electrum (Fig. 31). Unlike the silver examples, this cup is decorated with eight spread-winged birds of prey, each attached to the rim with three round-headed rivets. The birds of prey, expertly cast and detailed with chased lines (Fig. 31, detail), are equally spaced around the rim. Facing away from the interior, their heads and necks project above the mouth of the vessel, making the cup awkward for drinking.

Most of the decorated vessels in precious metal from western Central Asia are chased around the sides, and occasionally on the base, with figural or geometric patterns. The use of three-dimensional ornament applied to the body of the vessel is rare: there are no others among the published examples. Decoration of any sort is also unusual on contemporary ceramic vessels from western Central Asia. However, in a survey of the Margiana region, Soviet archaeologists found a so-called ritual vessel in ceramic that, like the Schimmel vessel, has three-dimensional animals on the rim.⁵³

The bird of prey is prominent in the iconography of western Central Asia. On pieces under consideration here it is incorporated into the decoration of a silver ceremonial weapon, compartmented seals of copper and silver, and stamp seals carved in stone.

The posture of the bird of prey, with wings spread and legs tucked under its body, as if seen from below, has an extremely long life in the art of Iran. In the Foroughi collection is an uprovenanced seal, assigned to eastern Iran of the mid-third millennium on the basis of style and iconography, whose bird of prey, with wings spread and legs tucked under the body, carries a human figure on its back.⁵⁴ From Susa, in the west, an ornament assigned to the end of the third millennium also shows a bird of prey with its legs clearly pulled up under its body.⁵⁵ This ornament shares with the vessel attachments on the gold cup the oblique lines emerging from behind the feet that distinguish the wings from the body of the bird. This distinctive posture appears again, after a considerable time, during the last centuries of the second millennium B.C., in the art of northern Iran, on the bronze handle of a vessel and on a

famous golden bowl, both from the site of Hasanlu, near the south coast of Lake Urmia, in northwestern Iran.⁵⁶ It is noteworthy that during the first millennium attachments, often figures with bird bodies and human heads, were frequently applied to the rims of vessels, either buckets with handles or large cauldrons. This practice, known in the Hittite period at the site of Emar,⁵⁷ was common particularly among the Assyrians, the Urartians, and the Syrians, who in turn passed it on to the Greeks. Whether the Schimmel vessel has more than a formal connection with this later use of protomes on vessels awaits further evidence.

WEAPONS

Tools and weapons make up a large part of western Central Asian metal objects, and among them axes are singularly important.⁵⁸ Most of these weapons are cast in a copper alloy, though several are made of silver. The most common type is the shaft-hole axe originally riveted to a wooden haft. This kind of axe was used throughout the Near East, each region and period having its favored shapes. In western Central Asia a common shape has a splaying blade that, when sharpened, would serve for cutting or striking and an elaborated extension from the butt. This well-balanced shape was suited to figural decoration, which on ceremonial axes reached artistic magnificence, with images powerfully composed and finely executed. When so elaborated, animals, real or fabulous, were often incorporated into the shape rather than applied to it. Two of the most popular creatures shown on the axes were the horse and a fantastic winged dragon.

One variety of this axe type is in the Norbert Schimmel collection (Fig. 32). Here the blade is balanced with the protome of a horse projecting from the back of the butt. This axe, whose blade is thicker and less broadly splayed than most, is interesting technically because it is made in two parts: the horse-head butt has an internal loop that engages a projecting hook at the back of the shaft hole. The horse's head, stretching out on a long and graceful neck from the butt, is strongly modeled. The jaw muscles are formed by

rounded masses, the mouth and nostrils are defined, and the unnaturally large eye is rendered in relief; the ears are cocked forward, and the mane is separated into bunches that lie obliquely along the smooth neck. Other such axes with animals emerging from the butt are also known.⁵⁹

Another variety of this axe has a similar shape with a splaying blade and an elaborate butt. On this type, however, the entire axe is transformed into an abstracted representation of a real or fantastic creature. On such axes it is difficult to know for certain what creature is intended. On the example illustrated here (Fig. 33), it is possibly a horse's head, if the curved and separated extensions from the back of the long butt are seen as a stylized rendering of the horse's mane and the rivet hole, enclosed by an incised rhomboid, is seen as an eye.

The last of these axes⁶⁰ (Fig. 34) is even more stylized, as a beautifully balanced form with a splaying blade accented by a forked ridge emanating from the incised rhomboidal eye. The hair of the mane is elegantly indicated by two curved openings in the center of the upturned butt.

In the axe's simplest form (Fig. 35), it is not clear whether the maker had the horse or another image in mind. That the rivet is not transformed into an eye and that the butt is shaped more like a wing than a mane suggest that the winged dragon could perhaps have been the inspiration for the form of the axe.

The winged dragon occurs frequently in the imagery of western Central Asia, particularly on the carved stone stamp seals from Margiana and Bactria. Although its origins are probably to be found in the west, in Mesopotamia or Iran, the winged dragon became an important figure in Central Asian iconography, no longer an adjunct or an attribute of a divine power but having divine powers of its own.

The most detailed rendering of this fabulous being is on a magnificent shaft-hole axe (Fig. 36) in the Museum's collection. Because of its excellent execution and complex iconography, this axe contains a wealth of information that will be considered in some detail here. The axe is decorated on both sides with images, in relief

and in the round, of a bird-headed creature (here called a demon because of its supernatural appearance) grasping a boar and a winged dragon. It is represented twice, once on each side, and consequently appears to have two heads. The muscular body of the bird-headed demon, clothed in a short skirt, is human except for birds' talons replacing its hands and feet. The double head, the wings, and the skirt are covered with gold foil incised with detail. The musculature of the bird-headed demon, as well as that of the beings it dominates, is rendered by a distinctive linear pattern.

On one side of the axe, the bird demon grasps the boar by the belly with its right talon; on the other side it grasps the boar by the tusks. The posture of the boar is contorted to conform to the shape of the blade, the edge of which is defined by the boar's back. The boar's head is thrust forward, its legs are slightly bent, and its split tail curls round to one side. Its facial features are defined by relief and incised detail; the ridge of its back is hatched; small incisions on its body suggest fur.

With its other talon, the bird-headed demon grasps the winged dragon by the neck. Two overlapping wings, divided into segments alternatingly covered with gold foil, rise from the back of the creature. Its neck and underbelly are detailed with parallel ridges covered with gold foil.

The base of the axe is cut away and is finished by a series of silver wire loops that imitate leather thong. The entire background surface is intentionally marked with small nicks that look like hairs. The purpose of these skeuomorphs is not clear; perhaps they refer either to a leather-sheathed prototype or to the skin and hair of a wild boar.

The axe was cast in one piece, and the double bird head, the dragon's tail, the rings at the edge of this shaft hole, and the gold foil were added mechanically or cast on.

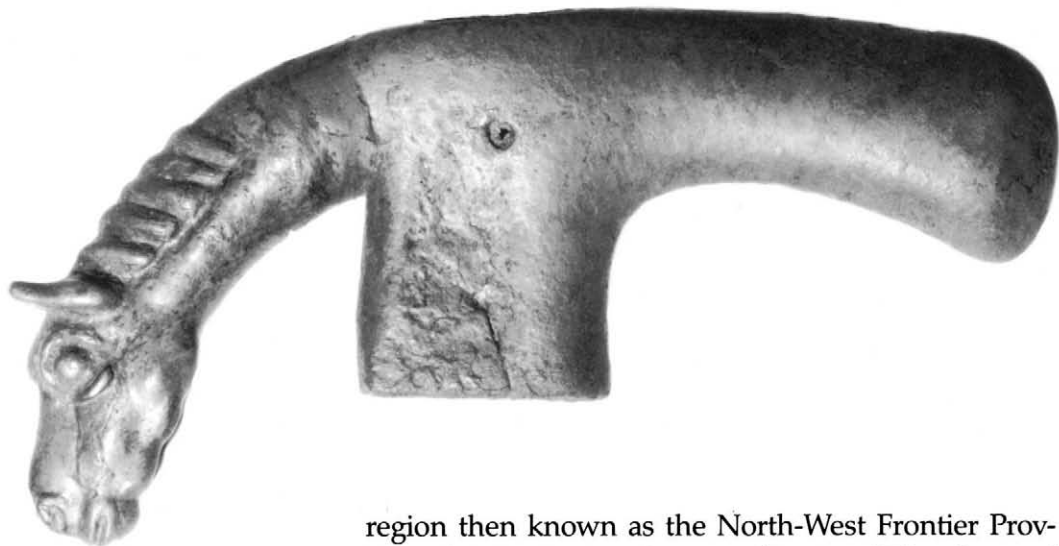
Although the axe is without provenance, its typology, iconography, and style all indicate that it was made in western Central Asia. The closest comparison is a bronze axe inlaid with silver now in the British Museum, documented in 1903 as coming from the





31

Cup with decorated rim
(above: detail)
Electrum
H. 4¾ inches (12 cm.)
Lent by Norbert Schimmel
L.1983.119.19



32

Shaft-hole axe
with horse head
Copper alloy
H. $3\frac{1}{8}$ inches (7.9 cm.)
Lent by Norbert Schimmel
L.1983.119.20

region then known as the North-West Frontier Province of India, just to the east of Bactria.⁶¹ The shape of the bronze axe, with its splaying blade, curving butt, and cutaway shaft hole, is very similar to that of the silver axe; on both, two metals are combined to enhance the design. The most specific correspondence between the two axes is the identical articulation of the blade in the form of a wild boar, a particularly strong similarity suggesting that these two ceremonial weapons were products of the same cultural milieu if not indeed of the same workshop.

The central figure on the axe, the bird demon, is known on the compartmented bronze stamp seals, where it is most often seen, with a single head, enthroned on a chair or a twisted snake, or kneeling with outspread wings.⁶² An early representation of this creature is found on a seal impression from Susa dated by its style and iconography to the mid-third millennium B.C.; some unusual features suggest that it might reflect eastern Iranian traditions.⁶³ Of similar date to this seal impression is a steatite or chlorite vessel, now in the Museum of Fine Arts, Boston, that shows a related demon with a human head, a bull's head for the body, and birds' talons for feet. This mixed creature dominates felines in a manner similar to the hero on the silver axe.⁶⁴

The double-headed aspect of this bird demon does not occur in the early representations of eastern Iran, but the tendency to create multiple-headed crea-

tures, especially with birds' heads, is known in the western Central Asian artistic repertory. For example, the silver compartmented seal shaped as a feline monster with three heads, one that of a bird, cited above was found in a rich grave in Level 1 of Altyn Tepe. A double-headed bird of prey is also reported by Sarianidi on a stone stamp seal from Bactria.⁶⁵ The multiple-headed aspect of a fabulous creature may have been borrowed from the Mature Indus Valley civilization, where it is found in the glyptic art.⁶⁶

The boar, whose back organically defines the nonfunctional cutting edge of the axe, is rare in the art of Mesopotamia or Iran after the early part of the third millennium B.C. But in western Central Asia the wild boar, which thrives in the northern piedmont strip and in the marshy regions of the Amu and Syr Darya, is at home in the Middle Bronze Age artistic repertory. In addition to its appearance on the two axes already described, it is similarly incorporated into the blade on a contemporary bronze weapon with gold rivets in the Louvre and into the body of a curious tulip-shaped tool type with pointed rear projections.⁶⁷ The boar is also seen on stone stamp seals from the Margiana region (see Fig. 29b). On one of the gold vessels from Maikop, a Bronze Age royal nomadic burial site in the western Caucasus, a boar is following a feline that attacks a caprid—exactly the same composition as on the British Museum bronze axe. On the Maikop vessel, the file of animals encircles a body of water into which two rivers flow from high mountains incised on the rim. Although the distance between Maikop and the Aral Sea basin is formidable, it is tempting to suggest that a maplike representation of the Pamirs, the Amu and Syr Darya, and the Aral Sea is incised on this vessel.⁶⁸

The fierce winged dragon forming the butt of the axe visually balances the boar on the blade. M.-H. Pottier has argued that this creature has its origins in Mesopotamia, where it first pulls the chariot of the weather god in the glyptic art of the Akkadian period, and then becomes an adjunct of Ningizidda, the god of the underworld, during the late third-millennium period of Gudea and the Ur III dynasty.⁶⁹ As with other motifs, when and how this fantastic creature entered



33

Shaft-hole axe
Copper alloy
L. 6¼ inches (16 cm.)
Lent by Steven D. Robinson
L.1979.44.123

the mythology of western Central Asia is not yet known. The creature has easily recognizable features: a feline body, folded and staggered wings patterned with alternating striations, mane hair in rows with a jagged upper edge, a snakelike head with gaping jaw and projecting tongue, a beard with a single curl hanging from the chin, and a single curved horn emerging from the top of the head. Some of these traits are often omitted; rarely is the creature represented in its full panoply, as on the silver axe.

The lack of written texts makes it impossible to understand the meaning of this elaborate axe. The iconography of the Central Asian glyptic is full of powerful male heroes, seen either enthroned or dominating dangerous forces like snakes, winged dragons, or boars. The bird demon of the axe is certainly one of those beneficent heroes mastering or at least balancing the forces of evil embodied in the winged dragon and the wild boar.

With its splaying blade and curved appendage, extending from the butt, the silver axe belongs to the so-called Khinaman halberd type defined by Peter Calmeyer in his study of the bronzes of Iran.⁷⁰ This name was given to axes of this shape because the first one was found at Khinaman, in southeastern Iran, near Kerman. During the excavations at Shahdad, Hakemi found a number of axes of this distinctive shape.⁷¹ It now appears that most of these axes come from western Central Asia, where one might suppose it was a local type.⁷²

A closely related tool has been found far to the west at Susa, a major center of the Elamite federation during the late third and early second millennia B.C. One example, now in the Louvre, is a bronze shaft-hole hammer with long, plumelike extensions from the butt and birds' heads extending above on either side of the shaft hole. This piece is inscribed with a dedication to Shulgi, a powerful king of the Third Dynasty of Ur who reigned in Mesopotamia from 2094 to 2047 B.C., controlled much of Elam, and campaigned frequently in the east.⁷³

Another tool of this type, this time an axe, is known from an actual example and from representations in the glyptic art, all found at Susa. The axe is formed as the head of a dragon with a single horn on its head and a curled beard beneath its chin. A bird's head above a curved wing emerges from the back of the dragon's neck, formed by the shaft hole. The dragon spits out a splaying blade from his gaping jaws.⁷⁴

This same weapon is passed between two figures in the representations of the glyptic art of the Shimashki dynasty, an Iranian line of rulers that controlled the Elamite federation after the kings of the Third Dynasty of Ur fell from power. The earliest and the most distinct of these seal impressions is that of Kuk Simut, a high official during the tenure of Idadu II as governor of Elam before he became king of Shimashki, sometime during the twentieth century B.C.⁷⁵ The axe in this representation is almost identical to the one found at Susa described above.

A much-simplified version of this axe with an asymmetrical splaying blade is associated with the



34

Shaft-hole axe
Copper alloy
L. 8 $\frac{5}{8}$ inches (22 cm.)
Anonymous Loan
L.1978.12

35

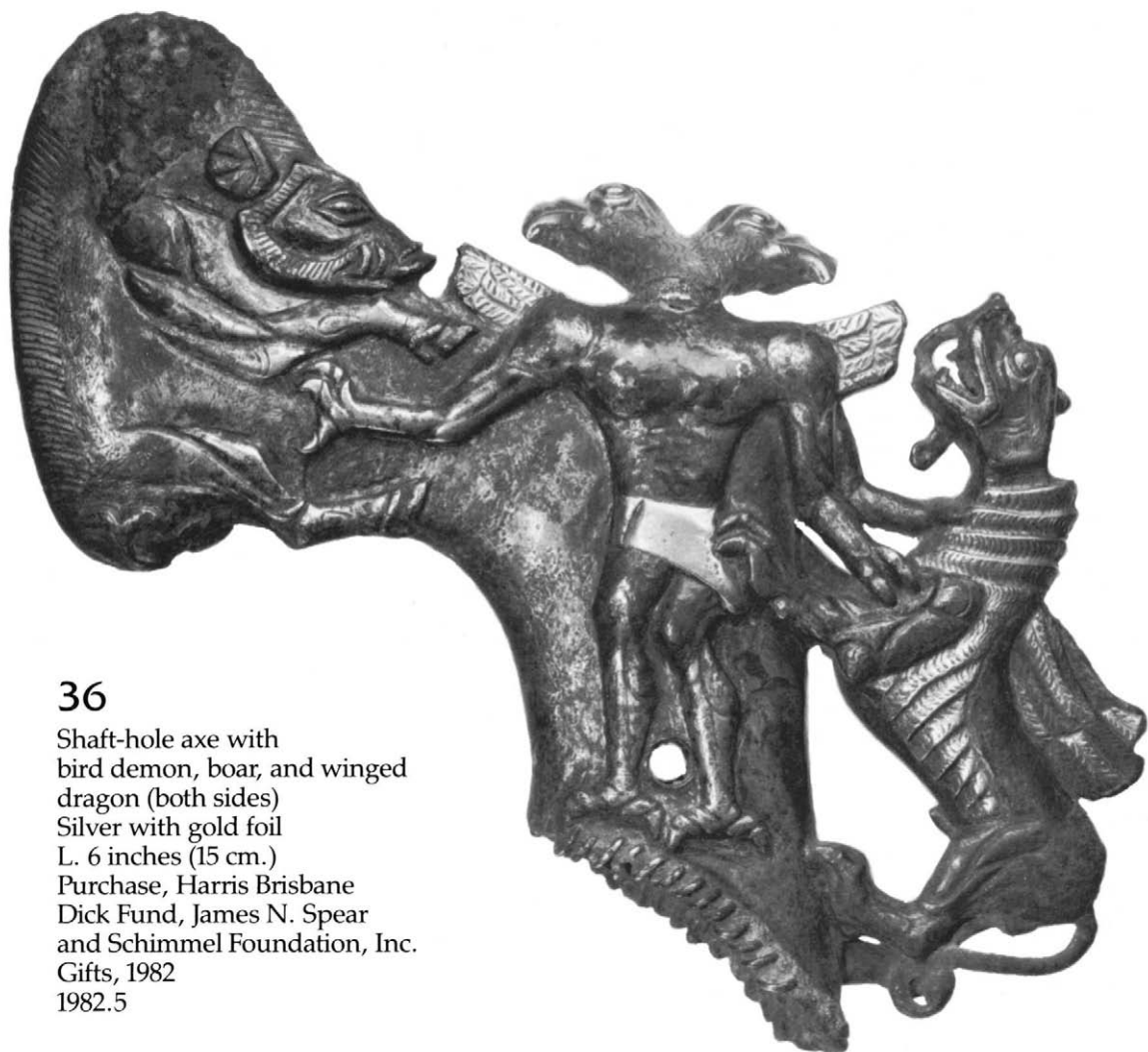
Shaft-hole axe
Copper alloy
L. 6 $\frac{1}{4}$ inches (16 cm.)
Gift of Steven D. Robinson,
1981
1981.448.23





subsequent Sukkulmahhu dynasty of the Elamite federation. Several examples of this type of axe are inscribed with the name of Addahushu, the grand-nephew of Ebarat, founder of this ruling house.⁷⁶

There is, in addition, a third type of axe, with no properly excavated parallels and no inscriptions for dating, that may belong, chronologically, between the two axe types found in the west. In the Museum's collection is such an axe (Fig. 37). On the front of the shaft is the head of a dragon that spits from between its fanged jaws an asymmetrical splaying blade. A bird's



36

Shaft-hole axe with
bird demon, boar, and winged
dragon (both sides)

Silver with gold foil

L. 6 inches (15 cm.)

Purchase, Harris Brisbane

Dick Fund, James N. Spear

and Schimmel Foundation, Inc.

Gifts, 1982

1982.5

head and a staggered pair of folded wings incised with a feather pattern emerge from the back of the butt. Around the top and the bottom of the shaft are raised and incised ridges that in other examples are reminiscent of snakes.⁷⁷ It is clear from the shape of the blade and the articulation of the shaft that this axe is a more highly elaborated relative of the axes inscribed for Addahushu. It is also clear that the Museum's axe shares with the earlier one found at Susa and the one represented on the seal impression of Kuk Simut a large number of specific features, which include the

37

Shaft-hole axe with dragon head
and splaying blade
Copper alloy
L. 5 inches (12.7 cm.)
Gift of Nuri Farhadi and
Habib Anavian, 1965
65.145.1



dragon, the staggered wings, and the bird's head. Thus all of these axes have abbreviated references to the drama enacted on the silver axe from western Central Asia. The only element missing on the western examples is the boar.

We know from the seal impression of Kuk Simut that tools elaborated with this iconography had a meaning for the Shimashkian kings, perhaps one as specific as a dynastic symbol, which was subsequently modified by the rulers of the succeeding Sukkumahu dynasty. We also know that this iconography was meaningful in western Central Asia during the same period of time. Until more research and controlled excavation can be undertaken in the regions of eastern Iran and Afghanistan, the explanation for the existence of this indisputable connection will remain unclear.

THE INDUS VALLEY

The Museum has in its collection several fine works of art belonging to the highly developed, apparently urban civilization that flourished at a time contemporary with the Bronze Age cultures of eastern Iran and western Central Asia, on the flat plain dominated by the mighty Indus River. With their headwaters in the Pamirs and the Himalayas, five rivers flow south through the Punjab (literally, the "land of the five waters"). There they join to form the Indus River, which meanders through Sind toward its mouth, south of the modern city of Karachi, where it empties, through a broad delta, into the Arabian Sea. The Indus annually overflows its banks, covering the flat flood plain with a rich alluvium carried down from the mountains. The plain itself is enormous, having an area of more than one million acres, and is effectively separated from its neighbors on the south by the sea, on the north by towering mountains, and on the east by the blisteringly hot Thar Desert. Only in the west, where the Sulaiman-Kirthar hills form the boundary between the Iranian plateau and the river valley, is passage relatively easy through numerous mountain passes. It is from these western foothills that the impetus came for settlement of the fertile alluvial Indus plain.

The Indus Valley Civilization was recognized through the work of Sir John Marshall, the first director of the Archaeological Survey of India during the early years of the twentieth century, and his staff. Until then, the known prehistoric evidence of the Indian subcontinent consisted of some Stone Age sites and scatterings of painted pottery. In 1921 a sounding was made into one of the mounds at Harappa, an ancient site in the

Montgomery district of the Punjab. There painted pottery was found that, together with engraved and inscribed seal stones and tools of copper or a copper alloy, indicated that a major, probably urban, culture thrived during the Chalcolithic period in the Indus Valley some one thousand years earlier than scholars had previously imagined. During the next twenty-five years, the large sites of Harappa, Mohenjo Daro, and Chanhu Daro were investigated through large-scale excavations that exposed major components of this complex culture.¹ Because much of this work was completed before the fundamental principles of stratigraphic excavation were developed, chronological phases within the Indus Valley period were neither observed nor recorded.

Until recently it was thought that the Indus Valley Civilization sprang up full blown in the river valley, with no identifiable local antecedents. Further consideration has shown that the origins of the Indus Valley Civilization lie in developed village cultures in the Baluchistan hills to the west and in the valley of the Indus itself. Sites such as Kot Diji, Damb Sadaat I and II, Kalibangan, and even Harappa have pre-urban-period occupations that share many traits with those of the later urban phase. Although these early painted-pottery cultures are regionally diverse, a number of technical features, design elements, and artifact types continue into the material culture of the urban phase. For some reason not yet fully understood, the organization of the early villages went through a rapid change that led to the growth of larger population centers, an increased specialization in full-time craft activities, and the invention of a formal written script and elaborate seal iconography.²

Scholars refer to this urban culture either as the Harappan Civilization, after the name of the site where it was first discovered, or as the Indus Valley Civilization, which reflects both its indigenous nature and geographic extent. Although neither name is entirely satisfactory and both names are currently used in the literature, the fully urban phase of this culture is referred to here as the Indus Valley Civilization or the Mature Indus culture.³



View of the Great Bath
in the northern half
of the citadel mound at
the site of Mohenjo Daro.

The geographical extent of the Indus Valley Civilization is immense. Sites of the period are found from Shortugai, near the northern border of modern Afghanistan, to the coastal site of Sutkagen Dor, in the south, on the Iranian border with Pakistan. To the east, the Mature Indus occupation has been identified as far as Delhi, in the north, and as far south as Lothal, in the Indian province of Gujarat. This is an enormous territory, far greater than that of contemporary urban Mesopotamia. How these distant sites were related to each other will not be known until further research provides a more refined chronology of site settlement and an understanding of regional differences that will clarify political and economic ties.⁴

Calibrated carbon-14 dates and external connections suggest that the process of urbanization had begun by the middle of the third millennium. Some scholars suggest that the early manifestations are found in both Sind and the Punjab, whence it spread to the south toward the mouth of the Indus River and east to sites such as Lothal.⁵

Early scholars saw the end of the urban phase as a rapid collapse followed by centuries of impoverished settlement. They ascribed the causes of this collapse variously to the Aryans invading from the Central Asian steppes; to devastating floods that de-

stroyed cities and changed the course of the river; or to increasing desiccation of the climate, which made extensive irrigation agriculture difficult. All of these theories, as well as the notion that the end of the urban phase was sudden and total, are now questioned. No completely satisfactory alternative explanation has been offered, but scholars argue that the reasons for the decline were to a large degree internal and probably involved the drying up and moving of water sources and the need for new arable lands.⁶ Whatever its causes, the decline of this civilization appears to have been a gradual process starting near the beginning of the second millennium, when urban features such as a written script, populous centers with monumental architecture, and uniform pottery styles gradually disappeared and were replaced by developed village settlements with distinctly regional characteristics.

The material culture of the Indus Valley Civilization is known from excavations of the major city sites of Mohenjo Daro, Harappa, and Chanhudaro, as well as of the smaller town sites such as Lothal and Kalibangan, northwest of Delhi.⁷ Although varying in size and no doubt in function, the major centers seem to have been highly organized, divided into a lower town to the west, with domestic quarters and industrial installations, and a fortified citadel mound to the east, on which public structures were built. Probably to protect them from annual floodwaters, the bottom stories of these monumental edifices were often made of baked mud brick, which certainly required vast amounts of fuel and manpower to produce. At Mohenjo Daro elaborate bathing and lavatory facilities suggest that these cities were relatively comfortable places to inhabit. Monumental installations, granaries for storing large amounts of food, and a rigid grid for the city plan suggest that the Indus Valley Civilization was a prosperous, urban one, with a centralized form of government. The apparent uniformity of the artifactual remains has been used to reinforce this interpretation. For example, a distinctive type of painted pottery found on the Indus sites, from north of Delhi to the Gulf of Cambay, is consistently a red-bodied ware decorated with geometric and figural motifs in black paint.

The same standardization applies to other groups of objects as well, including metalwork, sculpture, and the glyptic arts found in substantial numbers at the large city sites.

GLYPTIC ART

Hundreds of stamp seals engraved with images of wild or domestic animals, humans, fantastic creatures, and possibly divinities were found in the excavations of the urban centers, often with a line of still-undeciphered script at the top. For the most part, these seals were made of steatite coated with an alkaline substance and baked to produce a shiny, white, “glazed” surface. They are generally square in shape and average about one inch on a side, although some are considerably larger. On the back is a hemispherical boss perforated for suspension and bisected by an incised line. In addition to the square stamps, rare examples of round ones and extremely rare occurrences of cylinder seals were found, both shapes used commonly to the west, in Iran or Mesopotamia. The only internal development observed in the Indus Valley glyptic art is that this classic style seems to have been preceded by a miniature variety found in the lowest levels of the Mature Indus phase at the site of Harappa.⁸

The Museum has long had in its collection two complete examples and one fragmentary example of this type of stamp seal (Fig. 38a–c), all showing a bull. Rendered in strict profile, standing before what might be an altar, the bull is by far the most popular motif in the Indus Valley glyptic art; there is virtually no variation in either the style or the iconographic details among the individual examples. The shoulder of the bull is emphasized by an upside-down, doubly outlined heart shape that has been interpreted as painted decoration on the body of the bull, but is more likely an artistic convention for representing the muscles of the bull’s shoulder.

In addition to this bull, other animals inhabit these stamp seals—among them the water buffalo, the rhinoceros, the elephant, the humped bull, or zebu, and the tiger. There are also a few fantastic creatures in

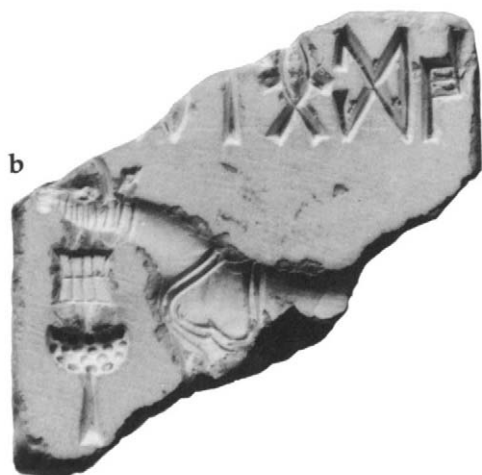
38

Stamp seals
Burnt steatite
L. 1 $\frac{1}{16}$ inches (4 cm.)
Dodge Fund, 1949

a 49.40.1

b 49.40.3

c 49.40.2



the seal cutter's repertory, including caprids with elephants' trunks and animals having multiple heads. Human or anthropomorphic divinities are rare on the Indus Valley stamps. When they do occur they are usually shown participating in a ritual ceremony; the most intriguing of these shows a humanlike figure with an elaborate headdress and arms full of bangles, seated frontally with knees spread and feet together on a low platform.⁹ It is possible that this is a representation of a major Indus Valley deity whose name and character are entirely unknown.

Most of the square stamp seals have an inscription along the top edge. No one has yet been able to convincingly translate these inscriptions because neither a bilingual text nor a text of sufficient length

exists. Only a few of the numerical signs have been tentatively assigned values. Scholars agree that the script is partly ideographic and partly syllabic in character, and Professor B. Lal has established that the script is read from right to left.¹⁰

The origins of this script are as enigmatic as its meaning. Its use is so far documented only in the mature urban phase of the Indus Valley culture. Some attempts have been made to locate its origin in the potters' marks on eastern Iranian and Early Indus ceramics of the first half of the third millennium; however, the number of signs that the potters' marks share with the fully developed Indus signary (of approximately four hundred signs) is very few.¹¹ Some scholars believe that there is no connection between the Indus Valley script and other western Asiatic writing systems.¹² As with so many questions in the history of the ancient Near East, greater understanding of the Indus script awaits further discoveries.

SCULPTURE

Sculpture in metal or stone from the Indus Valley Civilization is quite rare. From the many seasons of large-scale excavations at the major sites of Harappa and Mohenjo Daro, fewer than fifteen examples of sculpture representing both human and animal figures are known. Among them a wide range in quality exists, from schematic and crude to naturalistic and finely sculpted. The most famous pieces are an image carved in alabaster of a bearded male, probably a ruler, who wears a garment once inlaid with trefoil-shaped stones; a small male torso, beautifully sculpted from red stone, whose now-missing head and arms were made separately and perhaps of a different material, and were originally attached by dowels; and a lithe-bodied dancing girl cast in bronze.¹³ Each is finely rendered in its own distinctive style, suggesting that aesthetic variety did indeed exist in the Indus Valley Civilization.

Three stone statuettes carved in limestone of recumbent horned animals were found at the citadel of Mohenjo Daro during the 1922–23 season, when a large expanse of substantial architecture was uncovered. Two

39 (overleaf)

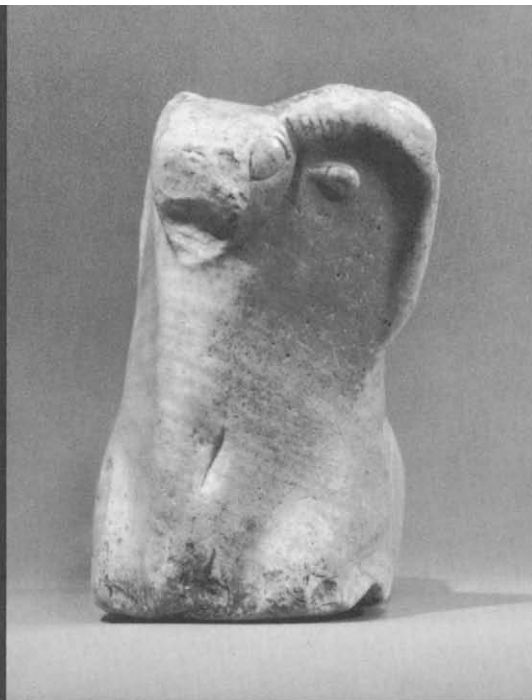
Recumbent mouflon
(inset: frontal view)

Marble

L. 11 $\frac{1}{6}$ inches (28 cm.)

Purchase, Anonymous Gift
and Rogers Fund, 1978
1978.58





of the animal figures, both resting on plinths, were described in the excavation report as fantastic creatures combining features of a ram, a bull, and an elephant. A third, without a plinth, resting directly on its folded legs, was described as a horned animal. On all of these excavated examples much of the head and horns has broken away, making a positive identification of the animals difficult.¹⁴

The Museum recently acquired from an old American collection the marble figure of a recumbent horned animal, an exceptionally fine piece of sculpture (Fig. 39). It is clear, even though the muzzle is partially broken away, that the figure represents a wild sheep, probably an eastern variety of the mouflon, which today inhabits the mountains of Asia Minor and Central Asia. The animal's head is held upward and twisted to the right. The head and forepart are combined into a powerful conical mass articulated in relief by sweeping horns and a small ear, as well as a pronounced neck mane and folded forelegs. The rump of the mouflon is slightly lower than its front. The artist has realistically rendered the resting animal with the weight thrown fully onto its left haunch, tucking the left hindleg under its body. Although the bottom of the statue is worn away, it is likely that this hidden leg was originally indicated there.¹⁵

The animal sculptures found at Mohenjo Daro are virtually identical to the one in the Museum's collection. Probably they are all representations of the animal in its natural resting posture. The horizontal striations down the neck of one of the excavated figures, interpreted as the trunk of an elephant by Ernest Mackay, are more likely the stylization of the neck mane of the mouflon. On the Museum's piece, the natural striations in the stone create a similar effect, and on the horned animals of the seals the mane is frequently separated from the neck by incised lines. All of these animal sculptures share many stylistic features, suggesting that the Museum's piece belongs with those from the Indus Valley. The unbroken outline, the massive forepart and diminutive rear, and the powerful torsion of the body make the Mohenjo Daro pieces fine examples of ancient Near Eastern sculpture.

CONCLUSION

The Bronze Age, which began in the early third millennium and continued through the first centuries of the second millennium B.C., was a dynamic period throughout the Near East. Complex societies developed, thrived, and declined from western Anatolia to the valley of the Indus River. Although for the most part independent, these peoples were not isolated from each other. The eastern regions described in this volume were interlinked by exchange and trade, and each supplied the urban centers of the lowland west with a variety of vital materials. We know from both written and archaeological evidence that during this period the cities of Mesopotamia imported substantial quantities of stones such as carnelian, alabaster, and lapis lazuli, as well as metals—copper, gold, and probably silver. It is now thought that tin—which, when alloyed with copper, makes bronze—was also a prominent item in this east-west trade.

These raw materials generally came from the Iranian plateau and the highlands of Central Asia, and their sources cannot, with current technology, be precisely located; those of lapis lazuli and perhaps tin, however, can be identified. The only source of lapis thought to have been used in antiquity is in the valley of Badakhshan in northern Afghanistan.¹ Recently two areas in the east were suggested as ancient sources of tin: one in southern Uzbekistan and one in western Afghanistan.²

Such goods traveled from the east over several paths to their final destinations in the west. An important route used until the fall of the Third Dynasty of Ur was overland from the eastern sources to ports on the Makran coast, where the materials were shipped up the Persian Gulf to the delta of the Tigris and Euphrates rivers. Another route passed overland south of the deserts of the Iranian plateau, perhaps through sites like Shahdad, where graves contained objects identical to ones found in western Central Asia. From there it proceeded west, either overland, through Fars, or by ship from the Iranian coast. A third probable path followed part of the famous Silk Route across the piedmont of northern Iran, south of the Caspian Sea, and through the passes that penetrate the central Zagros mountains. This northern route may have been the major passage during the early centuries of the second millennium, when the Old Assyrians maintained a lively trade in tin with Anatolia.

Sarianidi and others have pointed out the iconographic similarities between objects from western Central Asia and those from the west, particularly Syria and Anatolia.³ One striking example is the frequent appearance of the bird-headed demon in the glyptic art of Syria around the turn of the second millennium; another is the extensive use of the guilloche in the west. Both features appear prominently in the art of western Central Asia. Where and when such motifs originated and how they were transmitted from one region to another will only be known through further systematic archaeological investigation.

COMMENTS ON STYLE AND ICONOGRAPHY

BY EDITH PORADA

The fairy-tale image of the Persian city of Susa given by the fourteenth-century British writer Sir John Mandeville created a lasting picture of fabulous treasure in the country today called Iran. Susa was described as the residence of the imaginary Christian monarch Prester John. In a modern version of the Old English text, we read that

above the principal tower are two pommels of gold; and in either of them are two carbuncles great and fair, which shine right clear upon the night. And the principal gates of the palace are of precious stones, that men call sardonyx, and the bases of them are of ivory: and the windows of the hall and the chambers are of crystal. And all the tables on which they eat are of emeralds, amethysts, and some of gold, set full of precious stones. . . .

Geographical information was quite vague. Prester John's country, called Pentoxore, was thought to belong to India. Persia, which was named later than Cathay (China) and India, was said to consist of two kingdoms. Mandeville writes that "the first kingdom beginneth toward the east, toward the kingdom of Turkestan, and it stretcheth toward the west unto the river of Pison, that is one of the four rivers that come out of Paradise. And on another side it stretcheth toward the Septentrion [north] unto the sea of Caspian; and also toward the south unto the desert of Ind." The two towns mentioned in that part are Bokhara and Samarkand. "The other kingdom of Persia stretcheth toward the river of Pison and the parts of the west unto the kingdom of Media, and from the great Armenia and toward the Septentrion to the sea of Caspian and toward the south of the land of Ind." The

recognizable name of a town in that region is Nishapur. The principal error in this description is the extension of India into what is today the south of Iran.

Mandeville's geographical descriptions of these travels, however, were surely of less interest to his contemporaries than his accounts of the great wealth of the east. These descriptions seemed confirmed by the importation of beautifully patterned silks and fine bronze vessels inlaid in silver with delicate designs of figures and inscriptions in which the Arabic letters were ornaments in their own right.

Like the people of the Middle Ages, modern viewers judge an unknown civilization by the objects it produced. Thus the objects excavated in recent decades in Iran and neighboring areas suggest the existence of a developed craftsmanship producing objects for a demanding, sophisticated clientele. The lack of data surrounding the circumstances of the discovery of most of these objects has deprived us of the obvious avenue for gaining some insight into their historical and economical context. The present publication was planned as a compendium to gather the available knowledge and literature for determining the dates and locations of these works of art.

Most of the objects here assembled come from the regions of northwestern Afghanistan, called Bactria in classical antiquity, and eastern Iran; and a few pieces are from the valley of the Indus River, which flows through modern Pakistan. The objects range in period from the second third of the third millennium B.C. to the early part of the second millennium B.C. Some of these works show a style, not encountered at that time in other arts of the ancient Near and Middle East, characterized by voluptuous forms and sweeping lines found earlier only in the Proto-Elamite style of western Iran; this style was first recognized in seal impressions of Susa, in Khuzistan, near modern Ahwaz, and dated to the beginning of the third millennium B.C.

The subject matter of this style, which appears in stone carvings and designs on metal objects of eastern Iran, Bactria, and the Indus Valley, reflects aspects of the distinctive flora and fauna of the general region, differentiating its works of art from those made in the more western areas of Asia. Among the animals, the humped bull with incurving horns is characteristic. Less common is the markhor, a mountain goat with tall, spiraling horns. Boars and two-

humped camels are especially distinctive of Bactria, as are serpents, which occur even more frequently in designs of that region than in those of eastern Iran. In the portrayal of birds of prey, the thick bodies and lack of emphasis on the neck are notable.

In addition to the natural animals, composite creatures appear in objects from different sites of southeastern Iran. Such a creature is the lion-headed eagle, which was doubtless an importation from Mesopotamia, where it appeared as early as about 3000 B.C., and probably also the winged dragon, seen on the Metropolitan's magnificent Bactrian axe (Fig. 36) and in several Bactrian seals. The doglike head, however, and other features may express local concepts. The bird-headed demon of the axe, which also appears in several Bactrian seals, may have been a specifically eastern Iranian creation, to judge by the representations in a cylinder-seal impression found at Susa and dated about 2400 B.C. (see note 63, Western Central Asia).

Animals and composite creatures frequently turn or crouch in positions that form the sinuous curves mentioned above as one of the stylistic features common to many of the works of art shown here. In the compositions, the figures have a tendency to interlock and often seem to meld into each other. At the same time, the head is often turned at a right angle to the longitudinal axis of the animal or monster, as if to project the creature's influence onto the viewer.

In those designs where the surface of the entire object is decorated, as in a vase or a cylinder seal, the field is tightly filled, often without consideration of a groundline. The figures used in such designs lack corporeality and seem to float in an imaginary space. In striking contrast to such designs are those in which human figures are stocky and have bulging muscles, as on the axe shown in Fig. 7. Such figures are reminiscent of those of the Uruk period of Mesopotamia dated at the end of the fourth millennium B.C. Apparently this earlier style survived in some workshops in eastern Iran, and perhaps also in Bactria, while a more linear style prevailed in Mesopotamia. As yet it is not known whether such changes in the style of an area developed naturally, because of changing conceptions as to how figures and objects should be depicted, or whether a radically different style resulted from the appearance of a new ruling group with a different artistic tradition.

The magnificent axe and the various decorated chlorite vases, containers of silver, and slender pins with attractively decorated heads shown in this book convey an image of the elegance and wealth of the people for whom these objects were made. Unfortunately, no written evidence originating in these regions informs us of the course of history in the third and second millennia B.C. and of the lives of the inhabitants. By careful perusal of the Sumerian texts of Mesopotamia, however, P. Steinkeller has collected material indicating that eastern Iran may be at least partially identified with a powerful country called Marhashi (see note 26, South-eastern Iran). If this was the case, a site like Tepe Yahya, which was a source of chlorite, could have belonged to Marhashi. Its exportable stone, which was also worked at the site, could have been transported over easily accessible routes leading to the ports on the Strait of Hormuz, along the eastern coast of the Gulf, whence it could have been shipped to the rest of the Near East. In view of the important role played by chlorite vessels among the display objects of the ancient Near East, the trade in this stone must have brought considerable gains to Marhashi.

A second site that provides information about the wealth of eastern Iran is Shahdad, close to the Kerman range, rich in the minerals used by local craftsmen: chlorite and fine marble employed for vessels; and copper, used for vessels, axes, pins, seals, and other objects. Several routes linked Shahdad with central and northern Iran, and with the east.

A third example of a site where valuable materials were procured for making works of art in this period is Shahr-i Sokhta, in what may have been the country of Marhashi. This settlement in the wheat-producing and cattle-breeding area of the Helmand Valley of Seistan was excavated by Maurizio Tosi of the University of Rome. The western hills of the region yielded alabaster for the numerous fine vases made at the site; carnelian, of which beads were discovered at Shahr-i Sokhta, came from the river valleys of Seistan and the Hindukush, and turquoise, also used for beads, from Nishapur and Kerman.

There is evidence at Shahr-i Sokhta of lapidary work in lapis lazuli, for which the only sources thought to have been mined in the ancient Near East are in Badakhshan, Afghanistan. Thousands of waste flakes found at Shahr-i Sokhta have been interpreted as results of chipping away

impurities to reduce the volume and weight of the raw blocks for transport further west. There is no evidence, however, for intensive exchange with sites as distant as Susa or Mesopotamia. Instead, the external relations of Shahr-i Sokhta seem to have been limited to southeastern Iran and Oman, and southern Turkmenia.

Beyond eastern Iran lies Baluchistan, where, in an area called Makran, pottery of a style named after the site of Kulli was found in a number of excavations, indicating the existence of a distinctive culture contemporary, at least in part, with the Indus Valley culture. A frequent motif is a humped bull with long body, often with geometric patternings, and a strongly emphasized black eyeball within a white circle. A stylistically related portrayal of a bull is the draft animal on a large monochrome painted jar from Susa that is datable to about 2600 B.C. and now in the Louvre. It has been suggested by George Dales that the Kullis were merchant middlemen between the Mesopotamians and the Harappans, the people who developed the extensive culture of the greater Indus Valley, which flourished from about 2600 B.C. until the first centuries of the second millennium B.C.

It is likely not only that the Indus culture comprised the wealthiest of the political entities that produced and used the works of art here discussed, but also that they imposed their stylistic preference on these works either directly or secondhand, through the art of the countries under their political and cultural influence. Thus the occurrence of sinuous and swirling lines in patterns of various eastern regions may ultimately be traced to the Indus Valley culture: although admittedly few tangible remains from that civilization manifest such elements, some of the seal designs suggest their underlying presence. Similarly, the slender-waisted, large-breasted female figures known from later Indian sculpture are already represented in an imported fragmentary torso found at Susa and in one from Shahr-i Sokhta. Finally, the tendency toward naturalistic representation in some Bactrian works may reflect Indian influence.

No proof, however, can be cited for these speculations. All that can be said with certainty is that the objects shown here indicate the presence of demanding, sophisticated patrons served by a variety of skilled craftsmen who drew upon a large repertory of iconographic and stylistic traditions.

NOTES

Chronologies for chart on p. 10 are based on the following sources: For Mesopotamia, J. A. Brinkman, "Appendix: Mesopotamian Chronology of the Historical Period," in A. Leo Oppenheim, *Ancient Mesopotamia*, rev. ed. (Chicago, 1977). For Western Iran, Elizabeth Carter, "Excavations in Ville Royale I at Susa: The Third Millennium B.C. Occupation." *Cahiers de la Délégation Archéologique Française en Iran* 11: 35; Matthew W. Stolper, "On the Dynasty of Shimashki and the Early Suktalmahs." *Zeitschrift für Assyriologie* 72 (1982): 42–63. For eastern Iran and western Central Asia, Philip L. Kohl, ed., *The Bronze Age Civilization of Central Asia* (Armonk, N.Y., 1981), p. xxxi; Maurizio Tosi, Unpublished chronology for outer Elam, Turan, Baluchistan, the Indus plain, and the proposed cultural sequences for the northwestern regions of the Indo-Pakistan subcontinent (1967–77). For Indus Civilization, George F. Dales, "Archaeological and Radiocarbon Chronologies for Proto-historic South Asia," in Norman Hammond, ed., *South Asian Archaeology* (Park Ridge, N.J., 1973), pp. 157–69.

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1. Percy Sykes, *Ten Thousand Miles in Persia or Eight Years in Iran* (London, 1902), pp. 442ff., pls. facing pp. 442, 448; Canon Greenwell, "Notes on a Collection of Bronze Weapons, Implements, and Vessels Found at Khinaman." *Journal of the Royal Anthropological Institute* 37 (1907): 196–200, pl. 21.
2. Aurel Stein, *Archaeological Reconnaissances in Northwestern India and Southeastern Iran* (London, 1937).
3. Daniel Potts, "Tradition and Transformation: Tepe Yahya and the Iranian Plateau during the Third Millennium B.C.," Ph.D. diss., Dept. of Anthropology, Harvard Univ., 1980.
4. Philip L. Kohl, "The Balance of Trade in Southwestern Asia in the Mid-Third Millennium B.C." *Current Anthropology* 19 (1978): 463–92; Philip L. Kohl, "Carved Chlorite Vessels: A Trade in Finished Commodities in the Mid-Third Millennium." *Expedition* 18:1 (1975): 18–31.
5. Daniel Potts, "Echoes of Mesopotamian Divinity on a Cylinder Seal from South-Eastern Iran." *Revue d'Assyriologie* 75 (1981): 136, note 7.

6. Edith Porada, "Some Results of the Third International Conference on Asian Archaeology in Bahrain, March 1970: Excursus: Comments on Steatite Carvings from Saudi Arabia and Other Parts of the Ancient Near East." *Artibus Asiae* 33 (1971): 323–31.
7. Kohl, "Balance of Trade": 465.
8. Pierre de Miroschedji, "Vases et objets en steatite susiens du Musée du Louvre." *Cahiers de la Délégation Archéologique Française en Iran* 3 (1973): 20–26; Pierre Amiet, "Antiquités du désert de Lut-II." *Revue d'Assyriologie* 70 (1976): 1–8; Pierre Amiet, "Antiquités de serpentine." *Iranica Antiqua* 15 (1980): 155–60; Potts, "Echoes of Mesopotamian Divinity": 136–37.
9. Pierre de Miroschedji, "Un objet culturel(?) d'origine iranienne provenant de Nippur." *Iran* 10 (1972): 159–61.
10. Eva Strommenger and Max Hirmer, *5000 Years of the Art of Mesopotamia* (New York, 1964), pls. 38, 39.
11. Pierre Amiet, *Elam* (Auvers-sur-Oise, 1966), fig. 53, p. 99.
12. See, for example, the vase of Entemena, Winifred Orthmann, ed., *Der Alte Orient, Propyläen Kunstgeschichte* 14 (Berlin, 1975), fig. 120; or inlay on lyre from the Royal Cemetery of Ur, fig. IX top panel.
13. Ali Hakemi, *Catalogue de l'exposition Lut Xabis (Shahdad)*, exh. cat., 1972 Premier symposium annuel de la recherche archéologique en Iran (Tehran, 1972).
14. There is extensive literature on east-west trade in the Bronze Age; for trade in the early third millennium see Maurizio Tosi, "The Lapis Lazuli Trade across the Iranian Plateau in the Third Millennium B.C.," in *Gururā-jamañjarikā. Studi in onore di Giuseppe Tucci*, vol. 1 (Naples, 1974), pp. 3–22. For the later part of the third millennium see A. Leo Oppenheim, "The Seafaring Merchants of Ur." *Journal of the American Oriental Society* 74 (1954): 6–17.
15. Hakemi, *Catalogue*, no. 300.
16. Pierre Amiet, "La civilisation du désert de Lut." *Archeologia* 60 (July 1973): 27; Amiet, "Antiquités de Lut-II": 5, fig. 9; Hakemi, *Catalogue*, no. 253.
17. Erich F. Schmidt, *Excavations at Tepe Hissar Damghan* (Philadelphia, 1937), pp. 190–91, fig. 112.
18. *Bronzes et terres cuites du Louristan et de la Caspienne*, sale cat., Nouveau Drouot, Paris,

Collection X, room no. 5, Sept. 26, 1980, 2nd sale, no. 107; another of the same type, no. 108.

19. Maurizio Tosi and Rauf Wardak, "The Fullol Hoard: A New Find from Bronze Age Afghanistan." *East and West* 22 (1972): 9–17, fig. 16; Pierre Amiet, "Zur Prähistorischen Kultur Baktriens." *Das Altertum* 27 (1981): 147–55, fig. 7 (the provenance of Fullol for this vessel is presumably conjecture).

20. Strommenger and Hirmer, *5000 Years*, pls. 122, 123.

21. Orthmann, ed., *Der Alte Orient*, pl. 114; Edith Porada, *The Art of Ancient Iran* (New York, 1965), fig. 15.

22. For axes from Anatolia having similar shapes and no decoration see: Jean Deshayes, *Les outils de bronze, de l'Indus au Danube* (Paris, 1960), vol. 2, pl. 25, no. 9 (1573) from Ahlatlibel; Tashin Ozgüç and Mahmut Akok, *Horoztepe* (Ankara, 1958), pl. 8, no. 10.

23. Peter Calmeyer, *Datierbare Bronzen aus Luristan und Kirmanshah* (Berlin, 1969), pp. 183–84.

24. Amiet, "La civilisation du désert de Lut": 26. A stone axe in this shape and incised on the blade with the image of a bird with a human foot was found at Tepe Yahya: see Orthmann, ed., *Der Alte Orient*, pl. 279c.

25. Pierre Amiet, "Antiquités du désert de Lut." *Revue d'Assyriologie* 68 (1974): 106; Amiet, "Antiquités de Lut-II": 2.

26. Piotr Steinkeller, "The Question of Marhashi: A Contribution to the Historical Geography of Iran in the Third Millennium B.C." *Zeitschrift für Assyriologie* 72 (1982): 237–65.

27. M. Rostovtzeff, "The Sumerian Treasure of Astrabad." *Journal of Egyptian Archaeology* 6 (1920): 4–27, pl. III, 1.

WESTERN CENTRAL ASIA

1. For a summary of Central Asian prehistory see V. M. Masson and V. I. Sarianidi, *Central Asia* (Southampton, 1972).

2. Masson and Sarianidi, *Central Asia*, chap. 8; V. M. Masson, "Altin-depe and the Bull Cult." *Antiquity* 50 (1976): 14–19; V. M. Masson, *Altin-depe* (Leningrad, 1981).

3. Philip L. Kohl, ed., *The Bronze Age Civilization of Central Asia* (Armonk, N.Y., 1981), pp. xxviii–xxxii.

4. For a summary see V. I. Sarianidi, "Margiana in the Bronze Age," in Kohl, ed., *Bronze*

Age, pp. 165–93; I. S. Masimov, "The Study of Bronze Age Sites in the Lower Murghab," in Kohl, ed., *Bronze Age*, pp. 194–220.

5. Descriptions of the results of the Dashli excavations included in V. I. Sarianidi, *Drevnyaya baktriya* (Moscow, 1976); V. I. Sarianidi, *Drevnie zemledeltsi Afganistana* (Moscow, 1977); V. I. Sarianidi, "Bactria in the Bronze Age." *Soviet Anthropology and Archeology* (Summer 1976): 49–83.

6. A. Askarov, *Sapallitepa* (Tashkent, 1973).

7. H.-P. Francfort and M.-H. Pottier, "Sondage préliminaire sur l'établissement protohistorique harappéen et post-harappéen de Shortugai (Afghanistan du N.-E.)." *Arts Asiatiques* 34 (1978): 29–86.

8. Sarianidi, "Bactria in the Bronze Age": 60.

9. V. I. Sarianidi, "Seal-Amulets of the Murghab Style," in Kohl, ed., *Bronze Age*, pp. 221–55.

10. Considerably more archaeological research is needed before the chronological relationship between the western and eastern settlements will be fully understood. See Kohl, ed., *Bronze Age*, pp. xxx–xxxiii; Francfort and Pottier, "Sondage préliminaire": 59–60; A. A. Askarov, "Southern Uzbekistan in the Second Millennium B.C.," in Kohl, ed., *Bronze Age*, pp. 256–72.

11. Sarianidi, *Drevnie zemledeltsi Afganistana*, chap. 2.

12. Karl Jettmar, "Auf den Spuren der Indoiranier?" *Afghanistan Journal* 5:3 (1978): 87ff.; Pierre Amiet, "Bactriane proto-historique." *Syria* 54 (1977): 89–121.

13. Sarianidi, *Drevnie zemledeltsi Afganistana*, pp. 78–79; M.-H. Pottier, "Matériel funéraire de la Bactriane Meridionale de l'âge de bronze," IIIe cycle thesis, Univ. of Lille, France, 1981, pp. 116–18.

14. Pierre Amiet, "Antiquités de Bactriane." *Revue du Louvre* 28 (1978): 153–64 (see especially p. 155, fig. 6).

15. George F. Dales, "Turkmenistan, Afghanistan und Pakistan," in Machteld J. Mellink and Jan Filip, eds., *Frühe Stufen der Kunst, Propyläen Kunstgeschichte* 13 (Berlin, 1974), p. 180, fig. 100.

16. Sarianidi, "Seal-Amulets," p. 245, fig. 18.

17. Sarianidi, "Margiana in the Bronze Age," p. 175, fig. 5.

18. Viktor Sarianidi, "Bactrian Centre of Ancient Art." *Mesopotamia* 12 (1977): 97–110, fig. 69; Amiet, "Bactriane proto-histo-

rique": 116, fig. 20.

19. V. I. Sarianidi, "Kosmeticheskie flakoni iz baktirii." *Sovetskaya arkheologiya*, no. 2 (1979): 255–61.

20. Pottier, "Matériel funéraire," p. 66.

21. Erich F. Schmidt, *Excavations at Tepe Hissar Damghan* (Philadelphia, 1937), pls. 57, 58; one with three short legs, Aurel Stein, *An Archaeological Tour in Waziristan and Northern Baluchistan*, Government of India Central Publication Branch, Memoirs of the Archaeological Survey of India, no. 37 (Calcutta, 1929), p. 47, pl. 12; John Marshall, *Mohenjo-Daro and the Indus Civilization* (London, 1931), vol. II, pp. 492–93; vol. III, pl. 142, no. 6.

22. Sarianidi, "Kosmeticheskie flakoni"; Pottier, "Matériel funéraire," pp. 71–72; at Anau in ceramic, Raphael Pumpelly, ed., *Explorations in Turkestan. Expedition of 1904. Prehistoric Civilization of Anau*, Carnegie Institution of Washington Publication 73 (Washington, D.C., 1908); Masson and Sarianidi, *Central Asia*, fig. 31(j), p. 123; Askarov, *Sapallitepa*, pls. 25, 32.

23. These small steatite vessels are related to a type defined by Pierre de Miroschedji as the *style récent*. See Pierre de Miroschedji, "Vases et objets en steatite susiens du Musée du Louvre." *Cahiers de la Délégation Archéologique Française en Iran* 3 (1973): 9–79; Pierre Amiet, "Antiquités de serpentine." *Iranica Antiqua* 15 (1980): 155–66, fig. 1, pl. 2a.

24. V. I. Sarianidi, "Ob odnoi gryppe kyl'tovikh izdelii baktirii." *Sovetskaya arkheologiya*, no. 3 (1979): 262–65.

25. Viktor I. Sarianidi, "New Finds in Bactria and Indo-Iranian Connections," in Maurizio Taddei, ed., *South Asian Archaeology 1977*, Istituto universitario orientale seminario di studi asiatici series minor, no. 6 (Naples, 1979), vol. 2, pp. 643–59, fig. 2; Pottier, "Matériel funéraire," pls. 48–58, illustrates even more elaborate examples.

26. Francfort and Pottier, "Sondage préliminaire": 39, fig. 16; a similar pin found at Mohenjo-Daro, E. J. H. Mackay, *Further Excavations at Mohenjo-Daro* (New Delhi, 1937), vol. 2, pl. 100, nos. 3, 10.

27. Masson, "Altin-depe": pl. 29, no. 4; Sarianidi, *Drevnie zemledeltsi Afganistana*, fig. 44, no. 2; Askarov, "Southern Uzbekistan," in Kohl, ed., *Bronze Age*, p. 265, fig. 6; Schmidt, *Excavations at Tepe Hissar*, pl. 48; Madho Sarup Vats, *Excavations at Harappa* (Delhi, 1940),

vol. 2, pl. 125, nos. 34, 36.

28. Amiet, "Bactriane proto-historique": fig. 13, pls. 3 (fig. 22 here), 4; Amiet, "Antiquités de serpentine": 162–66; for composite sculpture in the earlier Namazga IV period see reference to a white-marble torso with tenon hole in neck, Masson and Sarianidi, *Central Asia*, pp. 108–9.

29. Pierre Amiet, "La civilisation du désert de Lut." *Archeologia* 60 (1973): 25; Walther Hinz, "Eine neugefundene Altelamische Silber-vase," in *Altiranische Funde und Forschungen* (Berlin, 1969), pp. 11–44, pl. 5.

30. Amiet, "Antiquités de serpentine": fig. 2; Pierre Amiet, *Glyptique susienne*, Mémoires de la Délégation Archéologique en Iran, vol. 43 (Paris, 1972), nos. 1899, 2279; W. G. Lambert, "Near Eastern Seals in the Gulbenkian Museum of Oriental Art, University of Durham." *Iraq* 41 (1979): 15, 38–44, pl. 5, no. 42; Matthew Stolper, "On the Dynasty of Shimashki and the Early Sukkalmahs." *Zeitschrift für Assyriologie* 72 (1982): 42–67.

31. See for example, M.-H. Pottier, "Un cachet en argent de Bactriane." *Iranica Antiqua* 15 (1980): 167–74, pl. 1.

32. Sarianidi, "Margiana in the Bronze Age," p. 177, fig. 6, no. 1, fig. 11, no. 31. Relief stone vessels have also been reported (fig. 6, no. 8).

33. Sarianidi, *Drevnie zemledeltsi Afganistana*, p. 47, fig. 19.

34. Mackay, *Further Excavations at Mohenjo-Daro*, vol. 2, pl. 87, no. 254.

35. O. M. Dalton, *The Treasure of the Oxus*, 2nd ed. (London, 1926), no. 193, pp. 47–49, pl. 24.

36. Sarianidi, "Bactrian Centre of Ancient Art": fig. 70, no. 12.

37. J. M. Casal, *Fouilles de Mundigak*, Mémoires de la Délégation Archéologique Française en Afghanistan, vol. 17 (Paris, 1961), vol. 2, pl. 45a; C. C. Lamberg-Karlovsky and Maurizio Tosi, "Shahr-i Sokhta and Tepe Yahya: Tracks on the Earliest History of the Iranian Plateau." *East and West* 23 (1973): 21–57, figs. 32–40.

38. V. Sarianidi, "Ancient Horasan and Bactria," in Colloques internationaux du C.N.R.S., *Le plateau iranien et l'Asie centrale des origines à la conquête islamique* (Paris, March 22–24, 1976), pp. 134–36; Sarianidi, *Drevnie zemledeltsi Afganistana*, p. 89.

39. Hakemi, *Catalogue*, pl. 21(b), pl. 22(b), pl. 23(b), pl. 24(c); also at Shahr-i Sokhta, Lamberg-Karlovsky and Tosi, "Shahr-i Sokhta and Tepe Yahya": figs. 41–49.

40. Masson and Sarianidi, *Central Asia*, p. 122.
41. Edith Porada, "Iranische Kunst," in Winifred Orthmann, ed., *Der Alte Orient*, Propyläen Kunstgeschichte 14 (Berlin, 1975), fig. 277.
42. Masson and Sarianidi, *Central Asia*, pp. 115–16, pl. 46 (top right).
43. First published in Sarianidi, *Drevnie zemledeltsi Afganistana*, p. 90, fig. 47, no. 7; then by Amiet, "Antiquités de Bactriane": 162, 164, fig. 33. Two other silver compartmented stamp seals that are extremely interesting for their iconography and that might be related to each other are M.-H. Pottier, "Un cachet en argent": pl. 1, and Katsumi Tanabe, *Animals in the Arts of the Ancient Orient*, exh. cat., Ancient Orient Museum, Tokyo (Tokyo, 1983), IV-26, p. 50.
44. Sarianidi, "Margiana in the Bronze Age," pp. 168, 169, fig. 2.
45. Sarianidi, "Seal-Amulets," pp. 221–55; Sarianidi, "Margiana in the Bronze Age," pp. 171, 184, fig. 7, nos. 8, 8a; I. S. Masimov, "The Study of Bronze Age Sites in the Lower Murghab," in Kohl, ed., *Bronze Age*, p. 211; Kohl, ed., *Bronze Age*, p. xxi.
46. Askarov, *Sapallitepa*, pl. 30; Sarianidi, *Drevnie zemledeltsi Afganistana*, pl. 1, no. 9.
47. Amiet, "Antiquités de Bactriane": 158–59, figs. 12–16.
48. Amiet, "Bactriane proto-historique": 120, fig. 22.
49. Sarianidi, "Seal-Amulets."
50. For the most readily available reference to the Maikop burial see Henri Frankfort, *The Art and Architecture of the Ancient Orient*, 4th (rev.) ed. (Middlesex, 1970), pp. 212–14; M. Rostovtzeff, "The Sumerian Treasure of Astrabad," *Journal of Egyptian Archaeology* 6 (1920): 4–27; Schmidt, *Excavations at Tepe Hisar*, pp. 210–12; Maurizio Tosi and Rauf Wardak, "The Fullol Hoard: A New Find from Bronze-Age Afghanistan." *East and West* 22 (1972): 9–17.
51. Askarov, *Sapallitepa*, pl. 17, no. 4; Sarianidi, *Drevnyaya bactriya*, fig. 22, no. 6.
52. Sarianidi, *Drevnie zemledeltsi Afganistana*, pl. 1, no. 8; Ali Hakemi, *Catalogue de l'exposition Lut Xabis (Shahdad)*, exh. cat., 1972 Premier symposium annuel de la recherche archéologique en Iran (Tehran, 1972), pl. 17d. Norbert Schimmel has in his collection another silver goblet identical to fig. 30 (right); when the base of this vessel was cleaned, a chased representation of the head of a wolf with its tongue hanging out was revealed.
53. Sarianidi, "Margiana in the Bronze Age," p. 180, fig. 4, p. 174. It was found in the Togolok Oasis, which was apparently one of the latest Bronze Age settlements in the Margiana; the vessel is of a shape entirely different from that of the electrum cup.
54. Edith Porada, "Problems of Interpretation in a Cylinder Seal of the Akkad Period from Iran," in *Compte rendu de l'onzième Rencontre Assyriologique Internationale* (Leiden, 1964), pl. Ia.
55. Pierre Amiet, *Elam* (Auvers-sur-Oise, 1966), fig. 189, p. 260; a similar bird of prey in stone with inlays assigned to western Central Asia, Tanabe, *Animals in the Arts of the Ancient Orient*, IV-1, p. 38.
56. Edith Porada, *The Art of Ancient Iran* (New York, 1965), pls. 9 right, 24.
57. Palais de Tokyo, Paris, *Emar: un royaume sur l'Euphrate au temps des Hittites*, exh. cat., Cahiers musée d'art et d'essai Palais de Tokyo, Paris, 9 (Paris, 1982), fig. 21.
58. V. I. Sarianidi, "Drevneishie topori Afganistana." *Sovetskaya arkeologiya*, no. 2 (1978): 186–94.
59. *Bronzes et terres cuites du Louristan et de la Caspienne*, sale cat., Nouveau Drouot, Paris, Sept. 26, 1980, fig. 159 (has a lion emerging from the back of the butt).
60. Published previously by Prudence O. Harper, "Copper-alloy ax," in Metropolitan Museum of Art, *The Guennol Collection*, vol. 2 (New York, 1982), pp. 6–8.
61. Dalton, *The Treasure of the Oxus*, pl. 24, no. 193, pp. 47–49. This axe is often identified as either Scythian or Sasanian. Peter Calmeyer, however, observed that this axe must belong to the Bronze Age culture of Bactria (*Datierbare Bronzen aus Luristan und Kirmanshah* [Berlin, 1969], p. 181).
62. Amiet, "Antiquités de Bactriane": figs. 33, 35.
63. Pierre Amiet, "Antiquités du désert de Lut." *Revue d'Assyriologie* 68 (1974): 107, fig. 13.
64. Pierre Amiet, "Antiquités du désert de Lut II." *Revue d'Assyriologie* 70 (1976): figs. 10–12.
65. Sarianidi, *Drevnie zemledeltsi Afganistana*, pl. 1, no. 2.
66. Mortimer Wheeler, *The Indus Civilization*, 3rd ed., supp. vol. to *The Cambridge History of India* (Cambridge, 1968), pl. 27 (lower right).
67. Pierre Amiet, *Les antiquités du Luristan* (Paris, 1976), fig. 11; Sarianidi, "Bactrian Cen-

tre of Ancient Art": fig. 63, no. 5.

68. Henri Frankfort, *The Art and Architecture of the Ancient Orient*, p. 213, figs. 241–43.

69. M.-H. Pottier, "Un cachet en argent."

70. Calmeyer, *Datierbare Bronzen*, pp. 182–83.

71. Hakemi, *Catalogue*, pl. 20a.

72. Sarianidi, "Drevneishie topori Afgani-stana": type 6.

73. Amiet, *Elam*, p. 243, fig. 176.

74. Amiet, *Elam*, p. 407, fig. 307. It has been suggested that this axe was actually imported from western Central Asia (Amiet, "Antiquités de serpentine": 162, note 28) or less likely from Kerman (Pierre de Miroschedji, "Le dieu élamite au serpent et aux eaux jaillissantes." *Iranica Antiqua* 16 [1981]: 20).

75. Amiet, *Elam*, p. 258, fig. 187; Matthew W. Stolper, "On the Dynasty of Shimashki and the Early Sukkalmahs": 42–67.

76. Calmeyer, *Datierbare Bronzen*, pp. 46–48.

77. Miroschedji, "Le dieu élamite": pl. XI, no. 4.

THE INDUS VALLEY

1. For history of excavation and research, and an extensive bibliography, see Gregory L. Possehl, ed., *Ancient Cities of the Indus* (New Delhi, 1979).

2. For discussion of development of the Indus Valley Civilization see M. Rafique Mughal, "The Present State of Research on the Indus Valley Civilization," reprinted in Possehl, ed., *Ancient Cities*, pp. 92–95; Walter A. Fairservis, Jr., "The Origin, Character and Decline of an Early Civilization," reprinted in Possehl, ed., *Ancient Cities*, pp. 66–77.

3. George F. Dales, "Archaeological and Radiocarbon Chronologies for Protohistoric South Asia," in Norman Hammond, ed., *South Asian Archaeology* (Park Ridge, N.J., 1973), pp. 160–63; Mughal, "Present State," p. 91.

4. For discussion of the current states of scholarship see J. G. Shaffer, "Harappan Culture: A Reconsideration," in Gregory L. Possehl, ed., *Harappan Civilization* (New Delhi, 1982), pp. 41–50.

5. Fairservis, "The Origin, Character and Decline," p. 75. For dates see Dales, "Archaeological and Radiocarbon Chronologies," pp. 157–69.

6. See discussion in Possehl, ed., *Harappan Civilization*, parts VI, VIII.

7. For a full description of the Indus Valley

Civilization see Mortimer Wheeler, *The Indus Civilization*, 3rd ed., supp. vol. to *The Cambridge History of India* (Cambridge, 1968).

8. Wheeler, *Indus*, p. 106.

9. Wheeler, *Indus*, pl. 27.

10. B. B. Lal, "The Direction of Writing in the Harappan Script." *Antiquity* 40 (1966): 52–55.

11. Most recently, Daniel Potts, "The Potter's Marks of Tepe Yahya." *Paléorient* 7 (1981): 107–22.

12. Iravatham Mahadevan, "Terminal Ideograms in the Indus Script," in Possehl, ed., *Harappan Civilization*, pp. 311–17.

13. Wheeler, *Indus*, pls. 18, 19c, 19b.

14. All three are published in J. F. Blakiston, ed., *Annual Report of the Archaeological Survey of India 1925–26* (Calcutta, 1928), pl. 29a,b,c. Identical to these large sculptures are many small amulet carvings from Mohenjo Daro on display in the National Museum in New Delhi.

15. Published by Edith Porada, "Mesopotamien und Iran," in Machteld J. Mellink and Jan Filip, eds., *Frühe Stufen der Kunst, Propyläen Kunstgeschichte* 13 (Berlin, 1974), p. 163, fig. 69; and by H. Pittman, in Metropolitan Museum of Art, *Notable Acquisitions 1975–79* (New York, 1979), p. 9.

CONCLUSION

1. Georgina Herrmann, "Lapis Lazuli: The Early Phases of Its Trade." *Iraq* 30 (1968): 21–57; Maurizio Tosi, "The Lapis Lazuli Trade across the Iranian Plateau in the 3rd Millennium B.C.," in Gururājamañjarikā. *Studi in onore di Giuseppe Tucci*, vol. 1 (Naples, 1974), pp. 3–22.

2. V. M. Masson and V. I. Sarianidi, *Central Asia* (Southampton, 1972), p. 128; Serge Cleuziou and Thierry Berthoud, "Early Tin in the Near East." *Expedition* 25: 1 (1982): 14–19.

3. V. I. Sarianidi, *Drevnie zemledeltsi Afganistana* (Moscow, 1977), pp. 90–91; Pierre Amiet, "Antiquités de Bactriane." *Revue du Louvre* 28 (1978): 162.

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